

**REPORT**  
**OF THE**  
**BIHAR EDUCATION RE-ORGANISATION**  
**COMMITTEE**  
**ON**  
**UNIVERSITY, ETC., EDUCATION.**



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# Report of the Bihar Education Re-organisation Committee on University, etc., Education.

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# Report of the Bihar Education Re-organisation Committee on University, etc., Education.

## CHAPTER I.

### AIMS AND OBJECTIVES OF A UNIVERSITY IN BIHAR.

1. A university, as commonly recognised, is an entity of pupils and teachers working together to cultivate all branches of art and science, learning and philosophy. Instruction and training in a university worth its name must be based on motives and springs not wholly utilitarian, or even calculated predominantly as being cultivated for mere material return. Knowledge is, and should be, pursued, particularly in a university, for its own sake. In the range of subjects selected for study; in the method adopted to cultivate the various arts and sciences making up the sum total of human learning; in the object and the outlook with which this knowledge, learning, or experience are sought, the university must be constructed and worked in true accord with this underlying aim. That meaning implies a catholicity of sympathy, and a fullness and universality of learning, which will feel satisfied only when all arts and all sciences are brought within its purview.

2. While a university, if thus conducted, is an organisation for an all-round cultivation of science, art, and learning, it is not, for that reason, to be regarded as being indifferent to the practical needs of everyday life, or the particular requirements of the people it is intended to serve.

“ The University must act as the custodian of the culture and attainments, literary and scientific, of a people linked together by some common bond of language and tradition; it must train and fit its *alumni* for the battle of life, and, to that end, teach them to cultivate and develop the vast resources of their country; and it must cultivate and promote the great ideal of the brotherhood of man by fostering a closer acquaintance with the arts and science, the sentiments and beliefs, the history and religion of the various communities.”\*

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\* Evidence before the Bombay University Reform Committee.

3. It has been well said by Cardinal Newman, in his classic work on the Idea of a University, "all knowledge is one, is a whole, and the separate parts of one". The business of the university, in his view, is to cultivate intellect so as to fit it to grasp all knowledge for its own sake.

"The true and adequate end of intellectual training of a University is not Learning or Acquirement, but rather, is Thought or Reason exercised upon knowledge, or what may be called Philosophy."

4. This conception of the university is by no means a wholly new ideal. In the West this conception of the activities of a university has been evolved in the course of centuries. From being a mere guild of teachers and scholars, banded together, not only to cultivate learning and philosophy, but also to defend their members against unjust exactions by their neighbouring powers, the universities have developed into associations of pupils and teachers, devoted to the cultivation of the highest stage of all arts and sciences cultivated largely for their own sake, though practical training for specific utilitarian ends is by no means excluded.

5. In the East, and particularly in India, the conception of a university, from the earliest times of which we have any record, has been synonymous with a body of men of learning, pupils as well as teachers, devoting themselves to the pursuit of knowledge in all branches of art and science. Such descriptions as we have of the ancient universities at Taxila, Nalanda or Benares, go to confirm this description of the aims and objectives of a university.

6. But this traditional idea of a university has, since the establishment of the British rule in India, been practically lost sight of. The modern universities in India have had a life of little more than 80 years, beginning with the three Presidency Universities of Calcutta, Bombay and Madras, all founded in 1857. From the start right up to perhaps within the last twenty years, universities in India have been regarded, not so much as centres of learning through instruction, training, discussion and debate with equals, or by experiment and research; but as mere examining machines, whose contact with the task of cultivating the mind of the *alumni* was largely indirect. And because of this, the *alumni* turned out by them are unable to make any real contribution to the advancement of science or learning, or tackle the problems of the country with any originality and daring. The examinations were looked upon only as passports to Government service.

7. The first Universities Act in India, no. XXII of 1857, aimed at establishing a university,

“ for the better encouragement of Her Majesty’s subjects in the pursuit of a regular and liberal course of education,” whose purpose was to ascertain “ by means of examination, the persons who have acquired proficiency in different branches of literature, science and art, and of rewarding them by Academical Degrees.”

The Allahabad University Act of 1887 had omitted the recitals and provisions in the older Act, which had been construed as restricting the earlier universities to the functions of an examining body. As the Indian Universities Commission of 1902 remarked: “ There is no doubt as to the legal power of the University to assume the functions of a teaching body ”.

8. The Indian Universities Act, no. VIII of 1904, modified their purpose and objective by laying down

“ The University shall be, and shall be deemed to have been, incorporated for the purpose (among others) of making provision for the instruction of students, with power to appoint University Professors and Lecturers, to hold and manage educational endowments, to erect, equip and maintain University libraries, laboratories, and museums, to make regulations for the residence and conduct of students, and to do all acts, consistent with the Act of Incorporation and this Act, which tend to the promotion of study and research.”

9. The Benares Hindu University Act, 1915, created a new type of university, a unitary residential one, which specifically authorised that body to

“ provide literary, artistic and scientific, as well as agricultural, technical, commercial and professional education, and to the prosecution of original research, giving instruction in Hindu theology and religion.”

Its distinguishing mark, viz. instruction in Hindu theology and religion, was also an innovation, which had been till then conspicuous by its absence from the constitutions of the Indian universities. The Aligarh Muslim University was established to discharge similar functions in regard to the education of the Muslims.

10. The Nagpur University Act, 1923, which follows the model of the Patna University Act, 1917, and combines an affiliating provincial university with one having limited teaching powers, prescribes the powers of the University as follows :—

- (1) " To provide for instruction in such branches of learning as the University may think fit, and to make provision for research and for the advancement and dissemination of knowledge."
- (2) " To provide lectures and instruction to non-collegiate students."
- (3) " To affiliate colleges and to arrange for their inspection."
- (4) " To institute Professorships, Readerships, Lecturerships and posts."
- (5) " To institute and award fellowships, scholarships, exhibitions, bursaries, medals and other rewards."
- (6) " To institute, maintain and manage colleges and hostels of its own."
- (7) " To supervise and control the residence and discipline of the University students and to promote their health and general welfare."

With minor changes the newer universities of India, viz., Mysore, Patna, Andhra, Delhi, and Travancore followed this model, while the older universities of Bombay, Madras, Calcutta, and Lahore (Punjab) have also modified their original constitutions on these lines. Agra is now perhaps the only affiliating type of university with examination as its main function.

11. The University of Dacca Act of 1920, dealing with a teaching and residential university, requires the University—

- (1) to provide for instruction.
- (2) to hold examinations and grant degrees.
- (3) to institute Professorships, etc.
- (4) to award Fellowships.
- (5) to institute and maintain Halls for the residence of students of the University.

There is here no power to affiliate colleges away from the centre, and consequently no need to make arrangements for their inspection, supervision and control. This model is followed in the constitution of the Allahabad, Lucknow, and, to some extent, Annamalai Universities.

12. The Osmania University at Hyderabad differs from all other universities in that it has abandoned English as the medium of instruction, and carries on all its activities through the medium of Urdu. All the necessary books of study and general reading have been prepared in the new medium of instruction. That University, therefore, stands out as a type by itself. But even here the general trend of studies, the basic outlook, and the main features of the work done, resemble very closely those in the other Indian universities.

13. Another really novel type of university in India may be found exemplified in the Gurukul at Kangri, the Kashi Vidyapith at Benares, the Bihar Vidyapith, the Vishwa Bharati at Shantiniketan, the Gujarat Vidyapith at Ahmedabad, and the Jamia Millia Islamia at Delhi. These hold out a great promise for the cultivation of the particular ideals with which they were founded along with humanities on relatively original and yet modern lines. As contra-distinguished from the other universities mentioned above, which are constituted by an Act of the appropriate Legislature, these are truly popular creations, born under the impulse of resurgent nationalism, and, so, saturated with that spirit and working under its influence.

14. Yet another, and unique, type of university in India is the university for women, established by Professor Karve at Poona with the aid of a munificent foundation from the late Sir Vithaldas D. Thackersey. This, too, is a non-official creation, meant exclusively for women, emphasising the need for proper cultivation of domestic science, and imparting its instruction through the mother-tongue. In these days, however, of a growing demand for complete equality between men and women for all purposes of education, this exclusive institution has naturally proved something of an anachronism, and has been forced to attract students by special efforts, even though the number of women undergraduates in other universities is rapidly growing.

15. There are thus the following main types of universities in India :—

I. Statutory universities :—

(A) in British India—

(a) Secular universities :—

(i) Purely affiliating, with examination as main, if not sole, function : Agra.

- (ii) Principally teaching universities with examinations as one of the less important functions :  
Dacca, Lucknow, Allahabad, Annamalai.
- (iii) Teaching and affiliating universities with examination as one of the important functions :  
Bombay, Calcutta, Madras, Punjab, Patna, Nagpur, Delhi and Andhra.
- (b) Denominational universities : Benares Hindu University, and the Aligarh Muslim University, wholly teaching and residential universities as in A(a) (ii).
- (B) Indian States—
  - (i) Mysore and Travancore of the same type as A(a) (i).
  - (ii) Osmania University with an Indian language as medium of instruction.

## II. Non-statutory or non-official universities :—

- (i) The national institutions born under a political impetus : Kangri, Vishwa Bharati, Gujarat, Benares, Patna, and Delhi.
- (ii) Karve University for women, using Indian languages for medium of instruction.

16. University organisation is thus, generally speaking, concerned with what may be called higher branches of learning and research in arts and sciences; and of the technique in applied sciences. The degree of proficiency attained is generally measured by the results of a formal examination, consisting of written answers to written questions, supplemented, in the case of sciences, by some form of practical test, and often by *viva voce* examination. The Indian university degrees are not regarded, even now, as equivalent to the corresponding degrees of the British, European, or other foreign universities, whether in humanities, material sciences, applied technique, or professional training. Aspirants to the highest honours in their particular fields have, therefore, usually to seek further training or education in Britain, as the only gateway, if one manages to pass it, for the highest grades of service and professions

17. The actual work of imparting such education is done largely in the institutions affiliated as colleges, which are devoted to the pursuit of various branches of learning and

science. The university, as such, is nothing but the culminating point in the organisation, whose function is mainly to examine and certify the proficiency of candidates sent up by the several affiliated colleges for the several degrees or diplomas with relatively little direct teaching work of its own.

18. At the present time, then, the principal aims and objectives of universities in India may be summarised as being concerned with :—

- (i) Education in the higher branches of humanities, arts and sciences, mainly through the affiliated institutions, which conduct such direct teaching through teachers employed by themselves, under varying rules for affiliation, regulation and supervision by the central University authority in each province. The sub-joined figures will give some idea of the numbers receiving such education.

*Table of graduates and undergraduates for 1935-36.*

Province.	Graduates.	Undergraduates.	Total.
Madras ... ..	2,403	15,503	17,906
Bombay ... ..	2,424	12,406	14,830
Bengal ... ..	5,233	27,340	32,573
United Provinces ... ..	4,279	8,391	12,670
Punjab ... ..	2,421	11,402	13,823
Bihar and Orissa ... ..	686	4,112	4,798
Central Provinces and Berar ... ..	634	2,712	3,346
Delhi ... ..	378	2,047	2,425

- (ii) The training of individuals in scientific subjects and laboratory work, in selected branches of physical and material sciences, more, however, with a view to give a general idea of the scope of scientific knowledge, than with any specific utilitarian objective.
- (iii) Grounding in the elements of professional studies which, to be of practical use in the profession, must be supplemented by practical training under an experienced practitioner, or in some well-equipped institution.
- (iv) The developmental research in general as well as in technical subjects, with a view to widen the bounds of knowledge in all such subjects.

19. The university, and, in fact, the entire educational organisation, may still be said to be not particularly concerned with the use the education imparted to its *alumni* can be put to. We hold, indeed, that the principal aim and the guiding principle of university activities is to provide knowledge for its own sake. But even though knowledge may be imparted primarily for its own sake, we cannot overlook the possibility, and even the necessity, of utilising it to some practical purpose by the recipient; and the university cannot be indifferent to such practical necessity. Knowledge, primarily imparted for its own sake, and simply because it helps to broaden the outlook, liberalise the thought, and train or develop the faculties of the recipient, may nevertheless be made to serve utilitarian ends, at the same time, if properly co-related. A definite co-relation between the knowledge acquired and its use in the concerns of daily life or for purposes of employment seems to be wanting in the existing university organisation and activities in India. A good deal of the problem of social unrest in the so-called educated classes may be said to be traceable to this lack of co-relation between knowledge imparted, or training given, and the actual use made, or even opportunity available for such use in every day life.

20. The university, as organised and functioning today, may likewise be said to be unmindful of the claims of the fine arts in its programme of work. The promotion of general culture, and artistic development are thus all neglected, or treated in a step-motherly manner.

21. Lastly, it may be added that, whereas the universities have, from their commencement, been devoted to examining candidates preparing for specific degrees leading to public services, or professional activities, actual training for any public service examinations is practically non-existing. The real preparation even for professional work in the university is, almost invariably, found to be inadequate for the successful prosecution of these professions; and that task has, therefore, to be performed by organised professional bodies. These organisations are relatively new, and have yet to evolve their own standards of professional training and etiquette. But, such as they are, they help to supplement the work of the universities in these branches.

22. The older universities had been entrusted with jurisdiction over areas which became utterly unmanageable as more and more people began to seek such education. New

universities were established and the organisation of the old University of Calcutta was recommended by the Saddler Commission to be radically recast. Though no amending legislation was passed, the Calcutta University itself was insensibly revolutionised, under the larger scope afforded by the Act of 1904, by the enthusiasm of the great Vice-Chancellor, Sir Asutosh Mookherjee. It developed in considerable strength postgraduate departments of arts and sciences. But even now, so far as undergraduate teaching is concerned, all the older Universities of Calcutta, Bombay and Madras, as well as those of Punjab, Patna, Agra, Andhra, Nagpur, Mysore and Delhi, can hardly be said to have undertaken any direct teaching which is still carried on by affiliated colleges.

23. On the other hand, for attending to the utilitarian concerns of a people's life, the universities have neither the means nor the authority. In a mechanised age, with material forces in the ascendant, it is, one can easily understand, impossible for even those who appreciate the importance of non-material values, to escape the prevailing trend that values everything in terms of money. The affiliated university colleges are, therefore, no better than large emporia for manufacturing on a mass scale clerks and superintendents wanted for the ordinary task of administration.

24. Even as regards the scientific and learned professions of Law, Medicine and Teaching, until very recent times, the universities have been merely laying down certain courses of study, to be carried out, in prescribed ways, by various institutions; and, at the end of the course, to hold examinations to signify the proficiency of the pupil entitled to set up as an independent practitioner in such professions. The professional organisations, however, such as the Bar Council, or the Indian Medical Council, have been obliged to devise their own rules for enrolling practitioners for law or medicine, for example, as regards the degree of competence, efficiency, honesty and fair treatment to its members, which, in the absence of any such regulations, would almost completely undermine the success, utility and credit of the profession.

25. The criticism commonly directed against university education in India needs to be carefully considered if we are to re-design the University for this Province on a more acceptable, enduring, and satisfactory basis. While accepting the fundamental principles that a university must cultivate every branch of art or science for its own sake, we cannot altogether

disregard, as has been the case hitherto with respect to most of the modern universities in India, the practical need of the people for whom these universities have been established. Such part of the nation-building, as has been attempted, does not owe much to the efforts of the universities, except perhaps in an indirect sense. The investigation, for example, of the mineral resources of the country, of its water power, of its forest wealth, of the potentialities of the land and people, which should have been directly taken up by the university in each province, or under its ægis, have been left severely alone by these organisations. And the task has been shouldered by Government only in response to the particular need of the particular occasion—when a war, or a famine, or the general inability of the people to meet any special demand of the moment, forced their attention to such needs of our national life.

26. This is a serious shortcoming, which, however, the leaders of university education in India may not accept as valid criticism of the working of universities in India. To their minds it is not a function of the university to consider the requirements of the everyday practical life of the country they live amidst, and to seek to develop its resources.

27. But even in the narrow conception of the university, as a body organised to cultivate academic learning as well as practical science and arts, it can hardly be said that the universities in India have made it their special function directly to promote learning for its own sake in all branches of knowledge. Education imparted in the university is of a set type, and is measured by success in examinations. It is intended by both the recipients of such education and those who provide it as only a gateway to certain chosen professions or occupations, mainly circling round service under the Government. This is far short of that ideal of the university which will make it an instrument for advancing learning, developing culture, cultivating science, fostering arts, resurrecting a people, reviving their civilization, and reorganising a vast social system.

28. Isolated and unconnected efforts have been made to cultivate this or that branch of science and learning intensively and practically. Generally speaking, however, facilities for experimental research in this country have been wholly lacking until relatively very recent times. And the results of the research that has been undertaken have not been

adequately popularised. By extension lectures, publication of books and research work, utilisation of even such modern devices as the radio and talkie, the university authorities can, if they choose, help to enlighten the public, supply information, and promote a better understanding amongst all the sections of the community. By such means they can help in the proper solution of the basic problems of civic life. But extension lectures in Indian universities are conspicuous by their rarity; and the utilisation of the radio and the cinema for large-scale dissemination of useful information and general knowledge are simply unknown amongst the university authorities in India.

29. The consciousness of civic rights and equality of opportunities is **neither** implanted nor encouraged by the universities of India. They have not yet awakened to a realisation of the inevitable changes due to the slow forces of modern industrialism, which is growing in this country, at however limited a pace; and of the consequent divergence of interests between the classes which own and those which work the new industries. The result has been that new social ideas, which have come to us sporadically from abroad, seem to emphasise the conflict of classes that, perhaps, may have no real roots in the country's own conditions. A careful study of these problems as they arise and a desire to investigate into the causes and consequences of the problem and of the ways and means to solve them, is almost completely absent from the curricula of the universities, or in the normal activities of its professors and students. Even if such problems at all find a place in the university curricula, they are treated more in the nature of academic discussion, than real, penetrating, constructive, or original contributions to social science.

30. The problems of life thus go on daily accumulating, and becoming more and more complex; and the one institution which may be expected to tackle them remains almost severely aloof. The one and only concern of most universities seems to be, not to disseminate knowledge, but to conduct examinations of candidates prepared by institutions theoretically affiliated to them, without any living and permanent contact which should make them both integral parts of one another. And though this may seem a little too harsh a judgment on many modern universities, the teaching conducted by the universities directly is still so exclusively theoretical that the word "academic" has almost become a synonym for reproach.

31. The University of Patna reflects the characteristics mentioned above. It is, relatively speaking, a recent creation of less than 25 years' standing. It was necessitated by the separation of the Province of Bihar and Orissa from the old Province of Bengal; and, accordingly, still continues to show symptoms of its origin and older affiliation by retaining the characteristics of the Calcutta University at the time when Bihar and Orissa colleges used to be affiliated to that University. There was the further handicap of its being a university serving two distinct Provinces, which have, in course of time, come to be separated politically, but which still maintain a common university. Since it has been removed from the centre of political power as well as of university administration 25 years ago, the Province of Bihar has remained, generally speaking, backward, not only in the development of higher education, but also in respect of the utilisation of the necessary resources of the country. Industrially and commercially, the Province is still backward, notwithstanding the enormous wealth of its mineral resources and natural facilities. This handicap of its origin and tradition acts as a brake upon the progress of the University. The University continues to be moulded on those ancient lines, which prove to be more and more obsolete and unsuited to the changing conditions under which the provinces, now endowed with a measure of local autonomy, are anxious to avail themselves of the new opportunities to develop their inherent resources to the utmost possible degree.

32. Having considered the shortcomings or defects of the present university organisation, we shall, in the pages that follow, consider the reorganization of the University on the lines we think best calculated to remedy these shortcomings. The suggestions, however, for reconstruction would be dealt with in the following chapters. But, with a view to give a general idea of our lines of reorganization, we would lay out here a brief outline of the main changes we contemplate.

33. The University is to cease to be a merely examining body, and be converted into a really teaching institution, carrying on its teaching work through colleges and departments of its own. The present colleges would be not only "admitted", as they are today; but a majority of them at least will become constituent, integral parts of the University so that the aggregate of the colleges and postgraduate departments, which the University may be conducting itself, would make up the University; and the University would be the sum

total of these colleges and departments. Colleges which do not choose to be, or cannot be, converted into constituent parts of the University, will also be placed under such effective control and supervision by the University that for all practical purposes they may be taken to be parts of the University. This relationship between the University and the colleges in Bihar is explained more fully below. The members of such college and department staffs would be directly under the University, their appointment, discipline, and removal being dealt with by the authorities of that body only. Each college may have, for the sake of administrative convenience, its own Council of Administration, made up of the Principal, such members of the staff, and any others that the University may think proper to appoint thereto from amongst its Fellows or other associates of the University in the work of teaching.

34. In the departments that the University conducts directly, namely, those for postgraduate studies in the main, the University would not only lay down courses and recommend books for study but also conduct the day-to-day management of such institutions. The appointment of professors, lecturers, and other members of the staff that it may think proper to appoint in each such case would likewise be in its hands only.

35. The University, thus reorganised, would be an autonomous body, free from any interference from any outside authority, and exercising its powers as a self-governing institution. How that will be done is sketched in the following pages.

## CHAPTER II.

### THE TYPE OF UNIVERSITY NEEDED IN BIHAR.

36. In redesigning the university for Bihar, there is one question of basic and structural importance, which may be considered and disposed of before taking up in detail its constitution and functions. We assume that the University, though at present functioning mainly as an examining body for the two Provinces of Bihar and Orissa, will either be confined to Bihar alone; or, even if maintained jointly with Orissa, there would be some arrangement for decentralising the work, so as to serve the special university needs of the Province of Orissa separately.

37. Considering the anxiety of the people of Orissa to have a university of their own, the outline of a reorganised university, sketched in these pages, would, the Committee trust, be helpful to those people in working out a scheme suitable to their own requirements. The Committee, however, could not themselves undertake to formulate any scheme for a university in Orissa, because of the absence of the necessary information.

38. Assuming, then, that the university for Bihar is to be regarded as being principally for this Province, we have to consider three alternatives, namely, (A) teaching university, (B) teaching and examining type combined, and (C) an examining university only.

(A) A unitary, teaching type of university, located in one central spot, which provides, from its own resources of men, money and material, tuition, practical training, and guidance in all branches of knowledge and technique up to the stage of postgraduate research to all the *alumni* who are admitted into its portals. This alternative of a unitary, residential, teaching university is impracticable, even if it were desirable or suitable, under Indian conditions. For, if adopted, it would restrict university education to an extremely small section of the total population likely to demand such education. At the present time (1937-38) in the Province of Bihar only, there are in all 5,074 scholars in the several colleges admitted, or affiliated to, or recognised by the University of Patna. And this at a time when the total number of boys and girls prosecuting their secondary education up to its finishing point is only a small fraction of what it would be if our recommendations in other parts of our Report are adopted.

39. When the entire child population of the Province has come to be educated through a complete system of Basic Education, a certain proportion of this number must be directed to secondary education in the interests of the Province, as much as in response to the desire for such higher education in that section of the people. We consider this proportion would be about a tenth of the number of boys and girls under training in the Basic stage,—say about 500,000 boys and girls. And of this, about a tenth may be able and qualified to seek university education, say, about 50,000 boys and girls. If a lesser number of women is attracted to the secondary, and a still smaller proportion to the university stage, we would even then have to provide for about 30,000 to 35,000 boys and girls in the university stage. From this development it would follow that, even though the work under our recommendations for a wholesale reorganisation of education will be very much more varied, specialised, and of a far higher order in the University than at the present time, the University will continue to attract the same proportion, which, in the aggregate, would be much—very much—larger than is the case today. Such a vastly increased number cannot be accommodated in a single centre. Nor can all the equipment, staff and outlay, needed for such a centre, be financed from one place only. The rest of the Province would, also, be naturally jealous of the undue importance thereby given to a single centre.

40. The cost, moreover, of advanced, specialised university education in such a single centre would be prohibitive to a large proportion of the people, if they have to go and engage in such studies away from their homes. The expedient of financing such specially suitable talent from the districts by means of scholarships would be inadequate, and, financially, impracticable. The University authorities would naturally not be able to provide scholarships and other similar facilities for all qualified students coming from a distance. The alternative, therefore, of a single, unitary, residential, teaching university for the entire Province must be ruled out as both undesirable and impracticable.

41. (B) A modified form of a teaching university consists in the university itself directly teaching only the more advanced, specialised branches of arts, science, and technology, of a postgraduate level, leaving the undergraduate work to be done by the affiliated or recognised colleges up to degree standard. Such a teaching university would

also have to be confined, as far as we can see, to one central place, in view of the limited resources that can be placed at the disposal of the university authorities. The benefit of postgraduate research and training in arts, professions, or applied science, will, in this way, be confined to a single centre, and so available to a very limited number of aspiring youths, perhaps far below the needs of the Province, and the numbers of those desirous of going in for such advanced education. Even if we succeed in specialising certain institutions,—located not necessarily at the headquarters of the University—e.g., Jamshedpur for industrial technology, Dhanbad for mineralogy, Chapra or Darbhanga for agriculture, Hazaribagh for forestry, thereby making available the highest level of education and training to a larger number, in these different branches, and establish centres of postgraduate training in each of these places in their appropriate subjects, we do not think this highest grade of instruction would be available to the number seeking it, or needed to be trained in it, in the various departments, quite as economically and efficiently as may be desired.

42. Considerations of economy, and even of efficiency, may, no doubt, provide an argument in favour of such a centralisation, of at least the highest forms of practical training or research. But, in view of the vast numbers needing such training, and the extremely limited extent of the people's resources, it is undesirable, at this stage at any rate, to make a postgraduate university directly conduct the more advanced, specialised studies in humanities and science, as well as technology, from one centre, leaving the earlier training of the university standard to the several colleges established in the various centres of population within the Province. Even if such advanced specialised training has, by force of circumstances, to be centralised in certain centres, the university cannot be wholly indifferent to the earlier stages of education within its jurisdiction, leaving it to the colleges without any restriction, control, or supervision.

43. (C) The third alternative is to make the university, more or less, as it is today, mainly an examining institution, whose only concern with the function of teaching is an indirect one, except at most in selected subjects of study or departments of training. That is to say, it may prescribe the standard of preparation for its various examinations, prescribe or recommend text-books and other works for study, lay down minimum courses of studies and practical work needed by way of

preparation for such examinations, require a certain fitness, bodily as well as mental, physical as well as moral, in the candidates aspiring to present themselves at its examinations, and also exercise certain general supervision over the staff, equipment, and methods by which this education is imparted. The actual teaching work, however, would have, under this system, to be left in the hands of the affiliated colleges, except possibly in regard to certain subjects of postgraduate study or technical research.

44. But even here, colleges, particularly those in outlying centres, may have to be affiliated and permitted to carry on such advanced studies and training, if they satisfy the university authorities that they have adequate equipment in regard to staff, buildings, libraries, laboratories, workshops, finance, and whatever else may be needed for conducting such advanced postgraduate studies. An exclusively examining university of this type, with only an indirect influence over teaching in the manner just mentioned, will, however, suffer from grave defects, making education in the university ineffective and un-co-ordinated. We think this alternative also unacceptable, at least in its entirety, under the changing conditions of the country.

45. If the university in Bihar is to play a direct and active rôle in the development of the Province, and of its resources in men as well as material; if it is to lead the way in a programme of national renaissance, and aid to revive Bihar's ancient glories; if it is to contribute its share in the task of reconstructing the economic and social system, it must necessarily increase the scope of its activities, and intensify their character.

46. In this view of the university and its duties towards the public, we consider that the only suitable form of university structure and organisation for the Province is one which would combine both examining and teaching functions. Its teaching functions proper may be delegated in a measure to the affiliated and recognised colleges; but these should act as integral constituent parts of the university, and conduct their activities in regard to teaching as agents of the university. The latter must not only prescribe courses, recommend textbooks, and approve of the staff and equipment; but also do some direct teaching in its own institutions, and arrange for a system of regular interchange of the staff of the different constituent colleges of the university, so as to make the university's part in conducting teaching in the colleges far more substantial and direct than it is today.

47. The problem may also be considered from another standpoint: Should we, in India, provide a university in each province, which would specialise in attending to the material and cultural needs primarily of that province and its people; and leave it to a federal university, common to, and yet separate from, the provincial universities, to attend to all those branches of knowledge and research, in their highest stage, which do not immediately interest individual provinces? If every provincial university tried to attend to all subjects up to the highest stage, the available resources may not suffice, at least in the poorer and more backward provinces, for the task in hand. On the other hand, if a federal university, of the type of the Zurich Polytechnic, is to be established to serve the needs of all-India in the highest stages of science, technique or research, the authorities concerned will have to see to it that full justice is done to the needs and requirements of each province, in the matter of resources to be developed, or students to be trained up. The federal university would, if established, of course, be primarily a charge upon the federal purse; but the provinces, too, will have to make contributions, not only in respect of the students to be trained up in the federal university from each province; but also to keep that body responsive to the demands of each province in regard to developmental research.

48. The problem is thus complicated in this country, not only because of the immense size of the country and the variety of its problems, but also because of the vested interests in the several provinces, which have already developed institutions of an ambitious, all-embracing type. The people concerned may not find a federal university equally serviceable to them in all parts of the country. Each section of the country would demand its own particular problems to be specially attended to by the central organisation, or the federal university, since, *ex-hypothesi*, their own university is not expected to attend to a full and proper developmental research for its own special problems. The advocates of a federal university expect to obtain greater strength and efficiency by combining resources in the federal university. If the federal university is not able to attend, for any reason, to the particular requirements of each constituent university, that organisation will itself come under serious popular criticism. And if any of the local universities are allowed to tackle all branches of arts and science, most units of the federation would have no desire to contribute towards the cost of the federal university.

49. There are, no doubt, at the present moment, certain central institutions, which, though not described as universities, are nevertheless functioning as common federal institutions for high technical training or research. They are illustrated by the Imperial Council of Agricultural Research, the Industrial Research Council, the Forest Research Institute at Dehra Dun, the Agricultural Research Institute at Delhi (formerly at Pusa in Bihar), the Indian Institute of Science, Bangalore, the School of Tropical Medicine, the Dhanbad School of Mines, the Lac Research Institute at Ranchi, or the Sugar Technology Institute at Cawnpore. But these have been directly established and are maintained by the Central Government, who have also organised a Central Research Fund from their own resources. Each province may benefit from the work of these institutions, and to which each may make any special contribution so as to have its own particular problems investigated. If these various institutions are all amalgamated into a single federal university, and made to function as integral constituent parts of a federal university, their individuality as well as variety would be lost, and no greater co-ordination gained than today. To replace these institutions by a single federal university by combining all these in one place, and set up a new federal organisation of a postgraduate level, to which all provinces would be equally entitled to send their students, their problems, and their contributions, would, it seems to us, be impracticable until, at least, we have had sufficient working knowledge of the system of federal organisation in other departments of our national life. That organisation has yet to be properly devised so as to meet with general acceptance amongst the people of this country; and before the political structure as a whole is framed, it would be premature to think of such of its off-shoots as a federal university for India. We, accordingly, consider that the suggestion for a central federal university, or an all-round research organisation, is too premature to be considered for the moment; and, as such, we need not dwell at any greater length upon it.

50. If, however, despite this opinion, the powers that be decided upon instituting, in the near future, a federal university, this Province may well contribute to that university on certain conditions. A reasonable number of students from Bihar, seeking the highest form of education, should be admitted to the several departments of such an institution; and a proportionate number, when properly trained, be

provided with suitable employment. The Government of Bihar may have to make some contribution for the maintenance of these students at the federal centre by means of scholarships or other grants; and may even be called upon by the Central Government, in view of the all-round activities of such a central institution, to make an additional contribution in proportion to its population, or the resources to be developed, or the students to be trained, or whatever other criterion may be selected for the purpose.

51. If, on this understanding, the university for Bihar is to be a university specialising in certain subjects, leaving the highest form of studies or training in all arts, sciences, and technique to a central federal university, the subjects of immediate importance to this Province, which its own university cannot afford to leave to any other authority, would be, besides the humanistic studies, such matters of applied science as relate to the development of agriculture, mineral wealth, and the industries founded thereon, for which this Province is so well gifted. We would suggest hereafter ways and means for developing this particular science or technique to the highest possible level, without an undue strain upon the present or prospective finances at the disposal of the University. Here, it would suffice to add that the University, as at present functioning, is not calculated to meet all the requirements of a planned programme of provincial development, which, we trust, will be put forward at no distant date; and which, when put forward, would demand a far more considerable contribution, a much more varied programme of work from the University, than is the case today.

52. Premising, then, that the university organisation most acceptable to the tradition, requirements, and possibilities of this Province would be that which combines both teaching and the examining functions in regard to arts, sciences, technique and professions, up to a prescribed level, it is obvious that the bulk of the undergraduate teaching, at any rate, will have to be continued in the constituent and affiliated colleges. Really speaking, these will be miniature universities, each in itself, at least in regard to the subjects that it undertakes to provide for. They would operate under the general supervision laid down by the central authority of the University. The colleges would in most cases be integral limbs of the University, and not merely independent institutions, or grown up daughters of the University, which may have, as the Patna College actually has, a longer tradition of independent existence than the University itself.

53. The type of university that we have advocated above, as being most suited to the conditions in this Province, would, naturally, place much more emphasis on its teaching and research functions than has been the case hitherto. This increased emphasis is all the more necessary because of the general and valid criticism that the standard of scholarship in this as in many other Indian universities is not high, and that the intellectual attainments and capacity of the average graduate far from satisfactory. In order to achieve this end, it is obviously important that the university should not only exercise much more vigilant supervision and control on the teaching imparted in its affiliated colleges, but should undertake a much larger share of actual teaching work, at least in its highest stages.

54. The most simple and logical method of securing this result would be to transform all the present institutions providing higher education into constituent colleges of the University, for whose staff, finances, administration, and actual teaching the University would be directly responsible. The colleges would then be part and parcel of the University; and the University would be a collective embodiment of all the colleges.

This view, which has many considerations in its favour, and which would certainly make better organisation and planning of higher education in the Province possible, was pressed strongly on the Committee. But we have had the advantage of discussing the pros and cons of this proposal with experienced persons, conversant with local conditions and sentiments; and, after that discussion, we are, on the whole, inclined to consider that it is not a practicable proposition, at least under the conditions prevailing in the Province. To give effect to it would involve the compulsory transfer to the University of all the property and funds of aided colleges, some of which have been or may be established under definite conditions of trusts; and it is not unlikely that this proposal might not find favour with some of the managing committees of such aided colleges. It might, also, possibly discourage further private enterprise in the field of higher education. Additional financial burden may also result on the University, if it were to take over full charge of all such colleges, which it may not be in a position to bear. We, therefore, feel that the balance of advantage is, on the whole, in favour of a university, which has both teaching and affiliating functions, provided that the former receive their due share of attention.

55. In order to ensure this we are of opinion that the University should, in the first place, make itself directly and exclusively responsible for all expansion and development in the field of postgraduate work and research, about which we have made various suggestions in this Report.

Secondly, so far as the various Government institutions imparting college education are concerned—whether in Patna or outside—we are of opinion that those should be taken over by the University, and should form its constituent colleges, so that the University becomes directly responsible for the teaching and administration of these colleges.

56. For this purpose, it will be necessary for Government to place the requisite funds at the disposal of the University, instead of disbursing them through the Department of Public Instruction which at present controls these institutions. The reason why we consider this transfer of control necessary is that, in our opinion, the control and organisation of higher education in the Province is properly the work of the University, which takes over, as it were, the function of Government in this behalf, *vis-a-vis* the colleges. The Department of Public Instruction is, properly speaking, concerned mainly with primary (or basic) and secondary education. Higher education should, if placed under the guidance exclusively of the University, have an autonomous character and the facility to develop freely along its own lines without undue official interference.

57. We, accordingly, contemplate no reasonable difficulty or objection in principle to this proposal, that the various Government institutions in this Province should be placed directly under the University. This would remove the present duality of control; it would make more effective supervision and co-ordination possible; and it would not involve any great financial implication.

58. In case there is any apprehension about the terms and conditions of the present employees who are in Government, not University, service, we are prepared to recommend that this transfer should not in any way affect those terms and conditions. The future recruitment will, of course, be made by the University under its own rules of service, so far as the aided colleges are concerned.

59. We cannot, for reasons stated above, recommend that the aided colleges be forthwith taken over compulsorily by the

University; but we are of opinion that they should have the option of becoming constituent colleges of the University. For the rest we make the following proposals with the object of ensuring the proper control of the University over their working :—

Firstly, the Government aid, which is at present given to them by the Government through the Department of Public Instruction, should be given through the University. In other words, the Government should make a reasonable grant to the University for the purpose, which will be allocated by it to the various colleges after proper scrutiny of their needs.

Secondly, the University should have an effective and substantial representation on the board of management of every aided college to keep the contact between such colleges and the University as close as possible; and to facilitate the control of the latter over the former. We do not think it necessary to frame rules in this behalf; but assume that, when the principle is accepted, the University would frame suitable rules in consultation with the colleges concerned, if necessary.

Thirdly, the appointments made on the staff of the colleges should be approved or confirmed by the University. We understand that even under the present Act, the University has the right to do so. In view of the crucial importance of selecting the right teaching personnel, we are of opinion that the University should exercise real and effective supervision in this behalf, in order to ensure that the standards of teaching and scholarship in the aided colleges are as good as in the Government colleges.

60. This would incidentally safeguard to some extent against the criticism that the University will have two different types of colleges within its jurisdiction. On principle, there is nothing objectionable in having various types of colleges within a university. As a matter of fact, diversity of approach should, under normal and healthy conditions, make for the enrichment of university life. In practice, however, the conditions that we have laid down above will ensure that aided

colleges fulfil certain minimum demands of the University deemed essential for the successful discharge of their work without discouraging private enterprise.

Of course, ultimately the success of every scheme depends on the people who work it, and the spirit in which it is worked. But assuming that reasonable conditions will be forthcoming for working out the proposals, we have suggested, we are confident that it will lead to the strengthening of the Patna University as a centre of education and research.

Let us now examine the present constitution and working of the Patna University, and make recommendations for such alterations or amendments as we find desirable and necessary.



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### CHAPTER III.

#### ORGANISATION OF THE PATNA UNIVERSITY.

61. The Patna University was intended, in the opinion of those who advised its creation, in the first instance to be,

“ A central University of the teaching and residential type, with affiliated colleges situated in other parts of the Province,”

as the best practical solution for the peculiar conditions of the then aggregate Province of Bihar and Orissa.\*

The new Province was expected to have a few centres of the highest education all over the Province; and the University was meant to supervise and control those institutions, to lay down courses of study for them, and the regulations for the admission and examination of the pupils. The authors intended the new University to be,

“ An institution, all the parts of which will gradually grow better and better, and for this to be possible, the various colleges must be members, on a fairly equal basis, of a homogeneous whole.”†

By providing centres of collegiate and university education in all the most important divisions of the Province, the Nathan Committee expected that any student of suitable ability would be able to receive the benefits of highest education as near his home as was practicable for the circumstances of those days.

62. Actual teaching was, of course, to be in the colleges “ admitted ” to the University, as they use the phrase, which in other universities of India is called affiliation. But the conditions of admission or affiliation, the courses of teaching prescribed by the University, and the general regulations for the supervision and guidance of teachers and students in the University, by the central University authority, made the constituent colleges, in the opinion of the Nathan Committee, an integral part of the University. In view, however, of the general scheme of the Patna University Act, as it was passed in 1917, and as it is worked today, it is impossible to regard the colleges “ admitted ” to the Patna University as constituent and integral parts of the University, in the sense that

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\*Report of the Patna University Committee,

† *Ibid.*

the colleges in Oxford and Cambridge may be regarded as part and parcel of the University. We cannot, accordingly, rightly describe the Patna University as a residential university of the type of Lucknow, Allahabad, Dacca, or even Delhi, let alone Oxford or Cambridge.

63. While collegiate institutions would be distributed at convenient places all over the Province, a central institution was intended to be established and developed at Patna. This would undertake instruction for the higher branches of knowledge, conducting examinations, supervising the general life and training of the students, and regulating the teaching and organisation of a number of "incorporated" colleges. This central institution would, of course, be the headquarters of the University, maintaining laboratories, lecture halls, libraries, and museums, and other necessary equipment and facilities, needed for the ordinary use of pupils and professors. A common *esprit de corps* would be engendered, the authors thought, by this means, amongst the *alumni* of the University, and all the ordinary requirements of the pupils' body and mind would be duly attended to. The collegiate institutions, clustering round the central institution, were intended to be residential, and were to be designed and conducted, so that all the students therein would be well cared for, and provided with every opportunity to enjoy a happy and useful university career. Non-collegiate students,—that is, those who did not reside within the colleges, but came as day scholars from outside the college area round about in the new city and neighbouring places,—were to be separately accommodated with a distinct organisation adapted to their special requirements.

64. On this basis in Patna, round about the University proper, the Nathan Committee intended\* to establish or develop four Arts Colleges, a Sanskrit College, and a Training College for teachers. Other divisions in the rest of the Province would have each a college, in Tirhut, Bhagalpur, Chota Nagpur, and Orissa. The teachers in these colleges must be regarded as members of the University, as much as the students, whether in Patna or in any other centre, in an affiliated college. If the students live and work at a distance

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\* Cf. Old section of the Patna University Act repealed in 1932. Cf. Proceedings of Council of 1931-32.

from the heart of the University organisation, the Committee recommended,

“ They must be brought on occasions to the centre, and inter-communication between the University and the internal colleges on the one hand, and the local colleges on the other, must be encouraged in the case of both teachers and students in all possible ways.”\*

65. These recommendations, collectively considered, show no hint of developing a new type of university, different from the old parent University of Calcutta, which would not only inculcate the given forms of knowledge, of more or less an abstract kind or academic value, in the minds of the students coming to them, but would also take a more direct and active part in moulding the thoughts and aspirations, as well as in providing suitable opportunities and training, for their realisation. There is no mention of the practical needs of the daily life of the student. There is no suggestion of a college of science, applied or theoretical; nor even of the usual professional colleges of law, medicine, or engineering. Less exalted, but no less necessary, occupations, in which the mass of the population live and move and have their being, are not even mentioned, much less any regular attention promised to be devoted through general or specialised colleges, suitably equipped for providing education and training in these more popular, though not spectacular, branches of knowledge, research, or technique. If we are to judge from the aims and objects, as given by the Committee itself, of the proposed University, we cannot but feel that they had unduly narrowed the scope of their own reference, or fundamentally misconceived the nature and purpose of a province, so rich in men and material, so full of ancient tradition of culture.

“ The aim of the University ”, they say in the very first chapter, “ should be, in the first place, to discover students of merit, and the net must be cast as widely as possible. From this point of view the existence of the various local colleges is all to the good, as they will connect all parts of the Province with the central University. Once attracted to a college, a clever boy will have a clear path, and there is no reason why he should not gradually qualify himself for the duties of a teacher and for work of an original kind.”

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\*Report of the Patna University Committee, 1914.

66. The “ work of an original kind ”—whatever that may mean,—is an afterthought. The real aim, the Nathan Committee seem to have set themselves to attain, by setting up a university in the new Province, was that of training up teachers. We have no desire to decry the teacher’s calling even by implication; nor do we underestimate the need for suitably trained and inspiring teachers for a province with Bihar’s possibilities, and yet with Bihar’s handicaps to overcome and leeway to make up. But we cannot conceal it from ourselves that a university which only trains up teachers, or is even *mainly* concerned with this objective, would fall far short of the legitimate expectations of the Province from such an institution.

67. A real, live university, must act as the fountainhead of all inspiration, and awaken and prepare the men and women of the Province for the immense task awaiting them, not only in the regeneration of this ancient homeland of the classic Indian civilisation, but in discovering and developing those untold but still unknown treasures of the mine and the forest, the land and waters, the hearths and the homes of the people of Bihar, which alone can entitle a university to be called *alma mater*, which alone can justify the outlay of money and energy needed to make it perform to the full the functions that must be entrusted to it, and deserve the privileges that must be accorded to it.

68. The Patna University, founded in 1917 on these recommendations, is an institution, which is intended, as section 3 of the Patna University Act lays down,

“ to have been incorporated for the purposes, among others, of making provision for imparting education, of promoting original research, of examining students and conferring degrees, of admitting educational institutions to its privileges, (and of inspecting the colleges and supervising all matters of education and discipline therein)”.

In this wording of the constitution, it is difficult to see a university which can justly claim to be a teaching as well as residential institution, with every impulse in education as well as in training emanating from its bosom; which would take the lead in all matters affecting the daily life of the people, and the revitalisation of their social organisation and economic activity; and which would radiate, to all parts of

the Province, its warmth and inspiration, where its work may be conducted, through its affiliated colleges.

69. At the present time, the Patna University has its headquarters in the city of that name, though its activities, such as they are, affect the present Provinces of Bihar and Orissa, with an aggregate population of nearly five crore souls. Around the University headquarters at Patna are grouped Colleges of Arts, of Science, of Law, of Medicine, of Engineering, as well as one for Oriental Studies. In the Province at large are to be found, located at different centres, the following institutions:—

*Arts.*

Name of Institution.	Standard up to which admitted.
Patna College, Patna ...	Up to the M. A.
Ravenshaw College, Cuttack ...	Ditto.
Science College, Patna ...	Ditto.
T. N. J. College, Bhagalpur ...	Up to the B. A.
B. N. College, Bankipore ...	Ditto.
G. B. B. College, Muzaffarpur ...	Ditto.
St. Columba's (Dublin University Mission) College, Hazaribagh.	Ditto.
D. J. College, Monghyr ...	Up to the Inter.
Ravenshaw Girls' High School, Cuttack.	Ditto.
Nalanda College, Bihar ...	Ditto.
Ranchi Zila School, Ranchi ...	Ditto.
Mithila College, Darbhanga ...	Ditto.
Rajendra College, Chapra ...	Ditto.

*Science.*

Science College, Patna ...	Up to the M. Sc.
Ravenshaw College, Cuttack ...	Up to the B. Sc.
B. N. College, Bankipore ...	Ditto.
T. N. J. College, Bhagalpur ...	Ditto.
G. B. B. College, Muzaffarpur ...	Ditto.
St. Columba's College, Hazaribagh	Up to the Inter.

*Law.*

Name of Institution.	Standard up to which admitted.
Patna Law College.	Up to B. L.
Ravenshaw College, Cuttack.	Ditto.

*Education.*

Patna Training College, Patna	Up to M. Ed.
Cuttack Training College, Cuttack	Up to Dip. Ed.

*Engineering.*

Bihar College of Engineering, Patna.	Up to B. C. E.
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*Medicine.*

The Prince of Wales Medical College, Patna.	Up to M. B., B. S.
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Regulations regarding the working of these colleges, their admission, and the like, are outlined in another chapter of this Report.

70. Before we consider more fully the organisation and working of the present University of Patna, let us cast a glance at some of the outstanding constitutional features of that organisation, and the criticisms urged against it.

Taking the criticisms first, and judging collectively, the constitution of the University today may be regarded as defective, because there are—

- (1) a nominated Vice-Chancellor,
- (2) an overwhelming influence of the Provincial Government,
- (3) the relative absence of the democratic principle in its governing bodies,
- (4) the lack of an element of responsibility between the executive and the legislative authorities,
- (5) undue concentration of functions in one and the same body or authority, and
- (6) absence of any wide contact with the general public.

71. In order to make the changes we have suggested to meet this criticism of the salient features of this University more easily intelligible, let us briefly summarise the guiding principles of our recommendations. In reconstituting the University, we would bear these principles in mind while devising the number of bodies, mutually independent or co-ordinated, which would deal with matters of policy, as well as details, conduct the general administration of the University; and lay down their respective functions.

72. The most important principle to be borne in mind, no doubt, is that these bodies should not be so numerous as only to add to the complexity, without increasing the utility and efficiency, of university administration. On the other hand, we must also see that functions are not concentrated in one and the same body to such an extent that the administrative or academic side might suffer. In the present Senate, for example, the academic as well as administrative functions have been concentrated to an excessive degree. Given the present size of the University—i.e., considering the number of students enrolled in it, and the branches of science or learning tackled by it—this concentration may not seem alarming. But, with the expansion of university activities we envisage, and the widening of its scope and purpose, this concentration is likely to be a handicap. The combination of many and dissimilar functions in one and the same authority is likely in the long run to prejudice the efficiency of the authority itself. It may, therefore, be necessary to provide arrangements for separating the administrative from the purely academic functions, and set up two bodies to deal with these two sides, viz., the administrative and academic, of university work, reserving, however, the co-ordination of both, and the general policy relating to either, in the hands of a supreme governing authority.

73. Another principle of equal importance consists in a proper co-ordination of the relations of the several authorities in the University as between themselves. Many of the functions and powers of several of those bodies and authorities may be inevitably overlapping at more than one point; and the university machinery may be needlessly complicated, if arrangements are not made in advance for smoothening out any difficult or complicated matter that may arise because of this inevitable overlapping of functions. A machinery must also be provided, within the University itself, to resolve such conflicts, disputes, or debatable matters, so that recourse be had by any such authority for such a purpose.

The University, moreover, to suit the changing conditions of Government and popular sentiment in this country, must also be more truly democratised than it is today. The direct or indirect influence of the Provincial Government in conducting the affairs of the University must be reduced to the minimum necessary; and the principle of responsibility, as between the executive and the legislative bodies in the University, must be introduced. Contact with the general as well as the University public must be made more real and more frequent, by introducing in the University authorities as large a measure of elected or popular element as possible; while in matters financial, too, the principle of responsibility must be more effectively enforced. The official element in the composition of the supreme University bodies must be reduced; and the elective principle must be adopted wherever possible.

74. Let us now consider the principal bodies, officers, or authorities in the University as it is constituted today.

At the head of the University is the Governor of Bihar, who is called the Chancellor of the University. He is the official head of the University, and presides at the Convocation of that body, when it is convened, either for conferring degrees, or for any other purpose.

75. In addition to his purely formal functions, the Chancellor has the right to confirm every proposal for the conferment of an honorary degree. He is the authority finally to decide any dispute regarding election of any person to be member of the Senate or Syndicate. These are mechanical provisions for the ordinary administrative routine of the University working smoothly. The Chancellor, however, is also vested with some extraordinary powers in the shape of the right to make an inspection or to have one of his nominees to inspect the University, its buildings, laboratories, museums, libraries, workshops and equipment, and of any other institutions associated with it. He is, under the same provision of the law, entitled to order an inspection of the examinations or the teaching, and every other work, carried on by the University. He can, likewise, order an enquiry in respect of any other matter connected with the University. Every time, however, that he intends to make such an enquiry, he must notify the University of his intention to do so; and the University is entitled to be represented at such an enquiry if one is ordered. No such enquiry has in fact ever been ordered; and we may take it, these provisions are maintained in the law,

more as a matter of form than of real substance in them, more by way of ultimate sanction than in any thought of their day-to-day utility.

76. The Chancellor has also the power to annul, by order in writing, any proceeding of the University which is not in conformity with the Act or Regulations. But, before making any such order, he must call upon the University to explain why such an order should not be made; and if he is satisfied with the explanation given by the University, he must accordingly modify his order. The Chancellor is entitled, under the Regulations, to appoint, on the recommendations of the Syndicate and the Senate, University Professors, Assistant Professors, or Readers; and he has also the power to remove them, subject to the conditions of their tenure of office. This is an extraordinary example of the influence of the executive Government, or its head, in the concerns of the University, which is likely to prejudice seriously the freedom of thought and expression indispensable for university teachers of all grades. In actual practice the Chancellor seems to have acted, in all such matters, on the advice of his Minister, who is a responsible authority under the new constitution; but there is no saying when he might claim these matters to be within his sole discretion; and as such prove a dictator for the University, with grave possibilities of a constitutional as well as an academic character.

The Governor of Orissa may be made Pro-Chancellor of the University so long as that organisation is common to both Provinces.

77. The Vice-Chancellor is the executive head of the University for all ordinary purposes. He is nominated by the Provincial Government, and not by the Governor in his discretion, as is the case with regard to many other corresponding officers in India. The tenure of the Vice-Chancellor's office is three years. But he may be re-nominated, from time to time, each time for not more than two years. The Vice-Chancellor presides at every meeting of any University body of which he is a member, including the Convocation, if and when the Chancellor is not present at that function. Subject to the general control of the Syndicate, a good deal of power is vested in the Vice-Chancellor, particularly in regard to the appointment and control of every servant of the University, whose aggregate emoluments do not exceed Rs. 200 per month. Like the Chancellor, though on a minor scale, the Vice-Chancellor is also entitled to visit and inspect every college in the University.

78. As chairman of the Syndicate, the executive of the University, the powers exercised by the Vice-Chancellor are extensive. He is, it is true, a nominee of the Provincial Government and not of the Chancellor; and, therefore, so far as the principle of responsible popular Government is a real fact under the new constitution in India, we may admit that the appointment in future would be a popular one. Nevertheless, the principle of nomination, if retained, is no substitute for the principle of an elective Vice-Chancellor, so far as the autonomous working of a university is concerned. It has been the general tendency of the development of all self-governing institutions in this country—like municipalities, district boards, or universities—that an elective head is being progressively substituted for a nominated executive head for such bodies. The right to elect the Vice-Chancellor by some authority in the university itself, e.g., the Senate, may be hedged round with certain precautions or restrictions, if considered necessary; such as that he can be duly elected only by a prescribed majority (e.g., two-thirds of the members of the Senate); or from the initial choice made by the Syndicate of two or three candidates; or that the election, to be valid, must be ratified by the Provincial Government. For our part, we do not consider such restrictions absolutely necessary, or even desirable, as they are more likely to cause needless irritation and party manœuvring than any abiding advantage to university administration.

79. Over the constituent colleges of the University the Vice-Chancellor has the right of visiting and inspection. No Regulations have been laid down to indicate how such visits and inspections are to be carried out, what is to be their object and occasion, and what their use. Except in the highly improbable event of grave dereliction of duty by any such institutions, such visits and inspections, if held at all, must prove of an ornamental nature only. This power, therefore, also tends to increase the importance and influence of the Vice-Chancellor in the University organisation, without adding to his responsibility or effective usefulness.

80. We would, accordingly, frankly vest the power to elect the Vice-Chancellor, in the Senate leaving that body to make its own Regulations regarding the procedure at such elections, the qualifications needed of the candidate, the requisite majority for a proper election, and any other conditions of the kind that it may be deemed proper to lay down.

81. Under the extension and expansion of the university activities and functions we have suggested in the reorganised University, the Vice-Chancellor's functions would be very considerably increased; and the time the holder of that office would have to devote to the University for an efficient discharge of his duties would be increased in proportion. We would, therefore, suggest that a suitable honorarium be attached to the office which may enable candidates, otherwise suitable in every way, but lacking in financial resources needed for the maintenance of the post in all its dignity and independence, to be attracted.

82. The relation of the Vice-Chancellor or of the Syndicate, the University executive, to the Senate is, under the present Act, not one of subordination or responsibility to the supreme governing authority in the University, viz., the Senate. The term "responsible", or "responsibility", is, in fact, nowhere mentioned in the Act. The powers, therefore, entrusted to this office of the Vice-Chancellor, may make him the most dominating figure in the entire organisation and working of the University. Being nominated from above, and unremovable during his term of office by any procedure, the Vice-Chancellor is naturally the real chief of the University, owing to the absence of any real responsibility he has to anybody within the University, or even outside its structure, except, perhaps, to the Chancellor.

83. We, accordingly, suggest that the Vice-Chancellor should be made an elected officer of the University, elected by the Senate and removable by that body under certain conditions, and made definitely responsible to the Senate and the Syndicate over which he presides. His term of office should be three years, but he must be eligible for re-election for one more term in succession.

84. The Vice-Chancellor, thus elected, should be made the *ex-officio* adviser of the Governor—whether he is Chancellor or not—in matters relating to the University, since that body is to be made into an autonomous institution by itself, as each of the other Ministers of the Governor is his constitutional adviser in regard to the departments of Government in his charge. The Vice-Chancellor will, indeed, not be a member of the Council of Ministers, under the scheme of reorganisation envisaged in this Report; and so he will not share jointly with the Council of Ministers responsibility for other acts of the Government of the day. Even as regards questions of fundamental policy or of finance, if there be any difference of opinion as between the Vice-Chancellor and the

Minister of Education, the latter's view must prevail so far as the Governor is concerned. But in matters relating purely to the University administration, the Vice-Chancellor must be taken to be that body's spokesman and representative; and in all questions in which the affairs of the University are in any way to be affected by the decisions of the Government of the day, the Vice-Chancellor should be assured a constitutional position of the kind suggested above.

85. The most considerable authority in the University is the Senate. This body consists of four classes of Fellows, namely *ex-officio* Fellows, Life Fellows, Representative Fellows, and Nominated Fellows. The first class consists of twenty-five members including the Vice-Chancellor; the second class of nine members, the third class of sixty members, and the fourth of fifteen nominated members at the maximum. At the present time, seven seats in the nominated block are vacant. Thus, in a total house of about one hundred, sixty can claim to be elected and representative of the various interests, such as, the teaching staffs of colleges (25), graduate teachers of schools (5), registered graduates (20), associations and public bodies (5), and the Legislature of Bihar and Orissa (5).

86. This constitution of the Senate cannot quite be said to be democratic or fully representative of the people of the Province. It is scarcely calculated to be directly responsive to popular sentiment and ideals of national reconstruction on democratic lines. Though apparently the elected representatives are in a majority, we must not overlook the considerable possibility of direct and indirect influence of Government, both through the nominated and the *ex-officio* Fellows, as well as through Fellows elected by various constituencies where Government can quite effectively exercise their influence. Except, perhaps, the registered graduates, it would be a stretch of imagination to believe that official influence would be non-existent in the Fellows elected from all other constituencies.

87. The position of the Senate, under the present Act, as a governing authority in the University administration, is ambiguous, restricted, and circumscribed, apart altogether from its own composition. Its relation towards the executive, the Syndicate, and its head, the Vice-Chancellor, is one, rather of indirect subordination, than of a supreme legislative authority, to which the executive is made responsible. The Senate should, we consider, be made, by express provision of the constitution, the supreme governing body of the University.

The Syndicate must, as an executive or administrative authority of the University, be made responsible to the Senate in discharge of its functions. An Academic Council should, at the same time, be constituted to deal with purely academic matters, e.g., prescribing courses and recommending books of study, laying down standards of examinations and suggesting examiners, helping to supervise the affiliated or constituent colleges, the health and welfare of the students, and other cognate activities of the University. On these and other kindred subjects, assigned to it, such a Council may make recommendations to the Syndicate for being given effect to. But the Senate, in its capacity as the supreme governing body in the University, must have power to rescind these regulations of the Academic Council, or of the Syndicate. It must, of course, have the authority to lay down, on its own initiative, lines of general policy even as regards these purely academic matters.

88. The Senate, the supreme governing authority of the University, comparable to the Legislature, has, apparently, a majority of the elective element. But the proportion of the elective element, and the effective utility of such elections to bring in representatives of the various constituencies, who would be completely free from any official influence, or really unamenable to official pressure, is very limited. In the appropriate place, we have suggested the extension of the democratic principle, in such a manner that the Senate may be truly representative of the interests that ought in fitness to be represented in that body. We have also suggested the ways and means of making its executive responsible to the legislative authority within the University. If the University organisation is thus made truly representative of the best interests or elements needing such representation within the Province, and if the University executive is made responsible to the supreme authority within the University itself, the official character of the University, which is today so evident, will be reduced to its legitimate limits, and its popularity and its dignity, as expressing the aspirations of the people towards a better life, would be assured.

89. If, as we believe, it is desirable in countries democratically governed—and particularly under the present conditions of India—that such institutions of abiding public utility as the University should be free, as far as possible, from any suspicion of direct official influence, there can be no objection to the suggestion that the composition of the Senate needs very much to be relieved of its official preponderance; that a considerable

proportion of its membership (say 80%) should be made truly elective, without any tinge of official influence; and the rest, if considered necessary, must be frankly nominated directly by Government without any camouflage of *ex-officio* seats, or indirect influence in elections of the representatives of electorates.

90. The principle of nomination by Government to the principal bodies or authorities in the University, and even of *ex-officio* membership of certain Government officials, needs, in our opinion, to be reconsidered. The possibility of advantage from such nominated as well as *ex-officio* members need not be denied. But the number of such nominated or *ex-officio* membership in the University bodies, as the Act stands today, is disproportionately large. The adjustment, moreover, of such elements to the other constituents of the University, and their capacity to appreciate the real needs of the University, detached from the official angle, creates new problems which might well be avoided.

91. At the present time, the following are the *ex-officio* members of the Senate of the University :—

1. The Vice-Chancellor.
2. The Minister of Education.
3. Ministers appointed by the Government of Bihar.
4. The Chief Justice of the Patna High Court.
5. The Director of Public Instruction.
6. The Inspector-General of Civil Hospitals.
7. The Director of Industries.
8. The Principals of Colleges carrying on instruction upto a degree standard, and
9. The Principal of the Cuttack Training College.

These aggregate, apart from Principals, about 12 or 13 in all. In a total membership of a little over 100, 25 *ex-officio* Fellows of this kind may not be regarded as excessive representation of the official element. Nevertheless, if we consider, for example, the direct concern in the affairs of the University, as we propose to reorganise it, of an officer like the Director of Industries, or even that of the Inspector-General of Civil Hospitals, we fail to see the living connection which the normal duties of these officers have with the ordinary working of the University. The Chief Justice may, indeed, be regarded as head of the legal profession, studies for which are amongst the important activities of the University. But even this justification cannot be found for

the *ex-officio* seat given to the Ministers, besides that of Education. They have no direct concern with University administration at all. Nor is their dignity, importance, or prestige likely to be enhanced by being made *ex-officio* Fellows of the University. On the other hand, the Principals of colleges should either all be equally made *ex-officio* members, or be equally excluded from membership, unless they can obtain admission through some other constituencies. An additional constituency, if it be so desired, may be formed of all the Principals of colleges affiliated to the University, and a certain number of them be made eligible from this constituency to serve in rotation, like certain Bishops in the House of Lords, so that all of them can have their turn in a given number of years.

On a balance of considerations, however, we would recommend that the following be *ex-officio* Fellows :—

*Ex-officio*.—The Chancellor, the Vice-Chancellor, the Director of Education, the Prime Minister of the Province and the Ministers of Education and Finance, the Chief Justice of the High Court, the Inspector-General of Civil Hospitals, and the Principals of the degree colleges. The aggregate strength of this class of Fellows may be, in round terms ... 20

Ministers meant here are to be taken as those in charge of the portfolios mentioned above, so that, in the event of any portfolios being combined in the hands of one and the same Minister, e.g. Education and Prime Ministership or Finance and Prime Ministership, the number of Ministers being *ex-officio* Fellows would be reduced from 3 to 2.

92. The nominated members are at present 15, in addition to these *ex-officio* members. Other officers of Government may also be brought in through the several constituencies mentioned below. Besides, the Chancellor is entitled to appoint five members for life on the ground that they have rendered eminent service to the cause of education. We think that this nominated or official element is disproportionately large, and should be reduced to not more than 15, not including representatives of Orissa, nominated by the Pro-Chancellor or Orissa Government in an agreed proportion, say 2 by the Pro-Chancellor and 3 by the Government of Orissa, or in that proportion.

Nominated Fellows :—

By the Chancellor	...	...	...	7
By the Government of Bihar	...	...	...	7

Government making their nominations will take care that any important interests, community, or section of the population, concerned with higher education, but not having representation on the supreme governing body of the University, will receive due representation through such nomination. On the other hand, the Chancellor, while making his nominations, may take into account considerations of scholarship or other distinction and eminence of individuals in the public life of the Province.

93. The Life Membership of today may continue on the lines laid down in the Act as it stands, the power to nominate Life Members (5) being vested in the responsible Government of the Province. A donor of any sum or property exceeding, say, Rs. 1 lakh in value may, however, be made automatically a Life Member; or, if he chooses to recommend some one else in his place, the person so nominated may be allowed to retain that seat in the Senate for five years. As a rule, nomination to Life Membership should be reserved for such persons as have rendered distinguished service to the University.

94. Let us now discuss the elected element in the Senate. In considering the representation of the different elements required to be represented in the various authorities of the University, we think, direct election by the appropriate constituency would be the most suitable device for securing such representation. For purposes of convenience, however, it is possible to divide the Province into certain divisions for such constituencies as those of university teachers, registered graduates, or schoolmasters. The justification for such a device, if adopted, would be to avoid disproportionate weightage being given to any part of the Province as against any other, and the consequent risk of a feeling of dissatisfaction or distrust in any considerable section of the people. It might also help to see that the requirements of any particular area within the Province are not overlooked. But, allowing for all these considerations, we do not think it advisable to recommend the division of the Province in respect of these constituencies.

95. The principle of proportional representation, by means of single transferable vote, may also be found to have its advantages. But the caveat must be entered at this stage that, sound as the principle of proportional representation may be for such purposes, it will not function unless *simultaneous* elections take place for a number of seats, where the proportion of the areas or interests sought to be represented may be reflected as desired. In the absence of any such arrangement, a bare majority may secure, quite conceivably, a complete

mastery over all University authorities and machinery. This may result in injustice to very important interests or minorities that being unorganised, may fail to obtain representation at all in the University authorities. Proportional representation is, moreover, a device suitable only where there are strong, organised parties, who concentrate all their strength on their party nominees. It is, however, undesirable that parties of this nature be formed in university bodies; or, if formed, they should be encouraged by incorporating such devices in the constitution.

96. The question whether we should have general simultaneous elections in the University, or be content with proportional retirement of a given number every year is not of much practical importance. The possibility of simultaneous elections can only be achieved in its fullness, if we recognise that the University is a popular, democratic body, which needs to test its standing with the public by general elections every five years or so. But, if such general elections were held for bodies like the Senate, there may be some danger involved in the continuity of policy or administration, which, it is essential, should be maintained, undisturbed in such organisations. Arrangements can, no doubt, be made, if such an eventuality occurs, for the *ad interim* carrying on of the University business during the course of the general election, and for sometime after, so as to avoid any dislocation of the routine business. The probability of a general election resulting in all new members being elected, who lack any experience or knowledge of university administration, and, therefore, are likely to interrupt the continuity of policy in university administration is, however, extremely small. To a very large extent, the old sitting members would be re-elected at every general election. The general election would thus really serve, it may well be said, to bring in, from time to time, new blood, without disturbing, to any material extent, the continuity of policy in administration that may be desirable.

97. Elections, it is true, always create a certain amount of bad blood; and, for that purpose, it is desirable to get them off within the smallest compass possible. At a general election, the scope for all deserving candidates would be much larger, and the device of proportional representation would keep within reasonable limits party sentiment, if parties arise in the University. But, once having accepted the principle of democratic organisation, even within the University, and the principle of responsibility as between the executive and legislature in the University, we think, the best means to provide for such a consummation is in the manner already mentioned, and subject to the safeguards already suggested.

98. It may be added that the objections to the principle of proportional representation, and a general election at one time, would be considerably minimised, if some sort of convention is established, or even constitutional provision made, by which a given proportion retires every year, and is open for re-election, but the rest of the body remains unaffected.

99. There are strong considerations, on the other hand, why this course may not be found quite suitable for the University, where general elections of the type just mentioned may more often obstruct the work than help it. There are no "general" constituencies for elections to the Senate, except, perhaps, the registered graduates; and even there, the simultaneous election of 25 members from that constituency may make the election cumbrous and involve unpleasantness which it is not desirable to encourage. The university is a body of continuous functioning; and so, if the whole of its supreme governing authority is open to re-election at stated intervals, the established traditions may suffer, and the continuity of policy be interrupted. On a balance of all relevant considerations, we think it is desirable to adhere to the present system and allow elections to take place every year by proportionate retirement of members from the different constituencies.

100. The question of separate representation of minorities like Mussalmans, or women, to which we have already alluded above, need not cause any very serious problem in the constitution of the University authorities. We consider it very likely that the principle of proportional representation will succeed in securing substantial justice in this matter, though it is possible that extremely backward classes, like women, or other sections of the community (e.g. aborigines), or religious minorities less numerous and organised than the Mussalmans, may not find what they consider to be adequate representation by this device. For their satisfaction, it may be necessary to have some reserved seats to ensure them the representation they feel entitled to by right of their numbers, or the importance of their separate culture and problems. But in no case would we advise separate electorates on sex, communal, or economic grounds. These have no place whatsoever in the university. It must recognise and maintain the fundamental equality of all citizens, irrespective of religion and sex, and also of opportunity for representation on the University bodies. Given the provision or convention for proportional retirement by rotation, and general elections from time to time, we think it is absolutely undesirable that any suggestion for separate electorates on communal grounds be entertained.

At the very worst, we would rather advocate a limited number to be nominated by Government to secure their due to small minorities of the kind mentioned above, than have recourse at all to separate electorates on communal or sex grounds.

101. Government, no doubt, formerly wholly irresponsible, is now learning the elements of responsibility to the elected representatives of the people at large, under the Government of India Act of 1935. Accordingly, the influence of the Government need not be considered wholly such as to be objectionable from the standpoint of university education, or the autonomy of the university authority, and the cultivation, development and dissemination of the result of higher knowledge and research for popular enlightenment. But, even so, the fact remains that the preoccupations of any popular Government, under existing conditions, cannot but make them lukewarm towards the cause of university education. Having yet to cater for the very elementary needs of the large mass of population in simple literacy, the new popular Government must needs devote every pie of their available resources, and even those obtained from additional taxation, to the cause of primary and Basic education. The University must, therefore, inevitably receive little more than indirect or secondary attention from Government. If the University is to keep burning the torch of higher education, create ideals for the advancement of science, knowledge and research, it is necessary, we think, to maintain a considerable degree of real independence and initiative in the University organisation, and reflecting the best popular element to the utmost degree. The existing composition of the Senate can, in this regard, be hardly said to meet the requirements of modern university administration; and hence our recommendations for improvement already made in that regard.

102. Let us now consider what elements should be represented in the Senate and to what extent. The most important element to be represented in the University Senate may, at first sight, seem to be the teachers. We hold, indeed, that a university, properly conceived and designed, should consist primarily of the teachers and the taught. In view, however, of the peculiar conditions of our times, we cannot leave such an organisation of the highest learning and research, for which the community as a whole will have to pay, entirely in the hands of those primarily concerned. Still, the university teachers must constitute a most important element in shaping the policy of the University. We have already suggested that *ex-officio* seats should be found on the

Senate for all the Principals of colleges providing instruction and training up to the degree standard, not only because these heads of colleges must be presumed to be experienced teachers as well as administrators, but also because it is impolitic to expose these persons to the vagaries of elections, or to the technique of electioneering. In addition, we are suggesting a separate body of academicians proper to look after the academic side of the University. This will consist very largely of teachers, whose business it is, indeed, to settle such matters, and advise the supreme governing or executive bodies of the University on these. If, as is commonly believed, this is not enough, we recommend that some college teachers may be elected by the Academic Council, say five; and another ten be elected by University teachers from among their own members. This will make a total strength of fifteen teachers in addition to the Principals of degree colleges, and such other University teachers as may find their way into the Senate from any of the other constituencies recommended by us. A total strength of teachers, as such, of twenty-five at least, in a Senate aggregating 150 members at most, will not be insignificant, or inadequate to look effectively to the academic side of the University's work.

103. Amongst the elements that need be represented in the University, the general public represented by the registered graduates, or by the special organisations of public opinion, like the Provincial Legislature or the local self-governing bodies within the Province, ought to be given a much wider footing than is the case today. We consider the present number of representatives of the registered graduates, 20, out of a total house of over 100, to be disproportionately small. We would suggest that this number be doubled to 40. The total number of such registered graduates, we recognise, is not so extensive as might be desired; and the conditions precedent to registration are not calculated to add rapidly to that number. We would suggest that every graduate should be automatically registered on the day he first takes a degree in this University, without any waiting or extra fee. By such means, and in course of time, however, this number is bound to increase, and a larger representation of those elected by the aggregate body of graduates would make the University more popular, as well as progressive than is the case today.

Graduates of other Indian universities resident in Bihar should be entitled to be registered on payment of a prescribed fee. Graduates of the existing Patna University should be enrolled immediately on receiving their degree, and without

any other fee than that included in the conferment of the degree, which may be specifically imposed as being fee for registration. Old graduates of the existing University, who may not be registered up till now, will similarly be entitled immediately to be put on the roll of registered graduates on payment of the fee for registration specifically prescribed.

104. Similarly, the representatives of the people, other than the registered graduates, though chosen indirectly, if we may say so, by the Provincial Legislature, or by the local self-governing bodies, should also secure a greater proportion in the University authorities, if the University is to be truly representative of the people of the Province, and amenable to their wishes for carrying out their unspoken aspirations. An aggregate of 20 representatives from these constituencies would be adequate for the purpose. Moreover, if certain elements in the population, which are numerically in a minority and educationally backward, such as women, or the backward class, or minority communities, are to find any representation on the University organisation, the only constituency from which they may find such representation would be that of the Legislature or the local self-governing bodies. The Legislature, consisting of two Chambers, as it is today, may lay down its own conventions for the representation of either Chamber, and the several interests within that Chamber, particularly women and the minority or backward communities. If the choice of the Legislature is confined to its own members, the field for election would, no doubt, be somewhat limited. If the Legislature as such is authorised to send representatives then it is unavoidable that the choice should be so restricted. As, however, these representatives are themselves the chosen representatives, in the first place, of the people or their particular constituencies, the restriction would not, if imposed, be materially objectionable. Besides, we must recognise that it will be, in the ultimate analysis, the Provincial Legislature which will, in one way or another, provide the University with the wherewithal of its activities; and so an adequate representation from that constituency ought not to be deemed out of place. We would suggest it be fixed at 7.

105. In the interests so far mentioned as likely to deserve representation on the University authorities, we have made no mention of that most important interest, namely, the undergraduates within the University, or the consuming public of the service which the University provides. The undergraduates are, as a rule, the only consumers of the University's service; and if they are allowed some voice,

however slight, in the concerns of the University, the requirements or aspirations of these people may fittingly find an expression which is at present absolutely denied to them. It is true that the undergraduate public would, generally speaking, be inexperienced and under-age. It may even be presumed not to have that knowledge of the constitution and the requirements of the Province collectively, in regard to the higher stages of education, which other bodies may be presumed to have. Nevertheless, inasmuch as they are the chief, if not the only, consumers or users of the University's service and beneficiaries of its activities, in accordance with the best traditions of democratic constitution and functioning, they ought to be given a certain voice, even though limited, in the programme of the University. It would help them to appreciate better the difficulties of administrative authorities; and teach them a sense of responsibility which can never be taught too early. It will also create in them a consciousness of self-government, and so vest them with a sense of dignity and importance which would go a long way to facilitate discipline and general welfare of the student world. And lest the ignorance or inexperience of undergraduates be advanced as an argument against them, it may even be added that, though all the registered undergraduates may form a constituency by themselves, the representatives to be elected by them should be only from graduates, who have taken their first degree not more than three years before the date of the election, and who may be concerned with teaching, or otherwise themselves connected with the University service. Any person elected from this constituency may be allowed to serve a full term of five years, but must not be re-eligible from the same constituency as that would defeat the aim of such representation. A total choice of say, 2 seats, to be filled by election by the registered students of the University, graduates or undergraduates, confining their choice only to those who are recent graduates of the University, will be sufficient to mark the principle that the consumers of a service, the payers of taxation, are entitled to a voice in the administration or policy of the organisation supplying such service; or that the University consisting of the teachers and the taught should have some representation of both.

106. We think similar considerations may also apply to those other organisations of public interests, such as land-owners, tenants and workers, industrialists and businessmen, each of which has also an important concern in the administration and activities of the University. We would,

accordingly, suggest that representation be provided for Chambers of Commerce, or other such organisations representing commercial and industrial interests of the Province, land-owners and tenants, and workmen's organisations, up to five seats in all in the Senate.

107. We fear, however, that the Province is somewhat backward in the very existence of such organisations; and there is a noticeable lack of public spirit and familiarity with the working of such institutions, not to mention ideals and motive springs, which may make such representation, even if allowed, ineffective if not burdensome. We would, accordingly, suggest that if it is advisable to grant such representation to organisations of the type we have named above, a permissive clause may be introduced in the University Act, authorising rules to be made for conducting the elections from such organisations, prescribing qualifications of the people to be elected by them, and regulating the right of elections, in proportion to the experience or concern of such organisations with the activities of the University most widely concerned.

108. A noteworthy shortcoming in the constitution and working of the Patna University, from the standpoint of democratic organisation is its lack of direct contact with public opinion in the Province; and the consequent inability to take a lead in the formulation and realisation of the unspoken ideals and aspirations of the people, in regard to social life and work. The University, if it desires to be a living organism, constantly shaping as well as expressing and attempting to realise the ideals of the people for a better life, must not live in a cloistered cell of its own. It must establish direct contact and maintain living connection with the organs of public opinion, or of popular sentiment, in the Province.

109. One way, no doubt, of establishing this kind of direct contact is, as we have already suggested elsewhere, the provision on the University governing bodies of an element drawn by direct election from organisations of public opinion. These however, may keep the connection between the public and the University; but will not be very effective, not only because such representatives of public bodies will have to be necessarily limited in number, but also because they may themselves be unable to appreciate the real needs of the Province in matters which concern the University, and so be unable to help the University to express the popular sentiment on the same subject. Moreover, even if they succeed in expressing public sentiment on given questions, they certainly cannot by themselves succeed in helping the University to shape and formulate such ideals, and also take the lead in the intellectual

and cultural life of the people in general. For this purpose, a university must initiate its own activities, by which not only would it seek to educate public opinion, and form or mould it, but also to have its own internal organisations, living and moving in an atmosphere of freedom. Such bodies as graduates' clubs, university students' unions, or even college associations of debating or dramatic societies, would easily be in a position to bring effectively to the notice of the University authorities public sentiment on any given question. They can also help to educate it in a direction thought appropriate by the University authorities.

110. Two other interests, vitally concerned with University education, viz., that of the secondary high schools preparing students for the University; and certain educational associations, like missions, doing educational work outside the University, should also have some representation in the supreme governing body of the University. A special constituency may be formed to elect, out of their number, five representatives to the Senate; while recognised educational associations in the Province may be allowed to elect another five members to the Senate. At least one of the associations, thus registered and recognised, and entitled to send representatives to the Senate, should be devoted to educational work among women; and that, one of these five seats should be filled by a woman.

111. To sum up, the Senate will be composed, under our recommendations, of the following classes of members:—

<i>Ex-officio</i> (about) ... ..	20
Nominated by the Chancellor ... ..	7
Nominated by the Government of Bihar ... ..	7
Elected by the Academic Council ... ..	5
Elected by University Teachers ... ..	10
Elected by Registered Graduates ... ..	40
Elected by the Provincial Legislature ... ..	7
Elected by organisations of commerce, industry, landlords, etc ... ..	5
Elected by associations engaged in education outside the University ... ..	5
Elected by headmasters of recognised secondary schools ... ..	5
Elected by Registered Undergraduates ... ..	2
Life Members, nominated for distinguished service to the University ... ..	5

In addition to these, there would be the *ex-officio* and nominated members from Orissa, so long as that Province continues to be served by this University, besides twenty-five members elected or nominated from the various bodies or authorities corresponding to those mentioned above with reference to the Province of Bihar. The aggregate strength of the Senate will thus be over 150.

The assignment of Fellows to Faculties, it may be added, should be made by the Senate on the recommendation of the Syndicate in each case. A Fellow may be assigned to more than one Faculty, if the qualifications or experience possessed by him or her justify such a decision.

The tenure of office of Fellows, other than Life or *ex-officio* Fellows, must be limited to five years, unless terminated earlier by death, resignation, inability to attend continuously for a year, and any other cause specified in the Act or the Regulations.

112. The powers granted to the Senate by the existing constitution, though expressed in fairly wide terms, as consisting of "the entire management of and superintendence over the affairs, concerns and property of the University, including all powers not specifically or otherwise provided for," are, in practice, extremely circumscribed and restricted. The particular powers given by sub-section (2) of section 7 are not even of deliberative importance, and, much less, of influencing, prescribing, or moulding the policy of the University in matters educational. Even its sanction over the finances of the University is of an illusory kind, since the letter of the law requires it *categorically* to pass the budget ("It shall pass Budget"). In practice, of course, it must be added, this rigour of the letter of the law is considerably modified; as the Senate passes the budget of the University with such modifications or amendments, on the side of the revenue as well as expenditure, as may have been proposed and accepted. The powers, again, excluded specifically by clause (3) of that section from the purview of the Senate, are thus restricted to purely academic, administrative, or disciplinary questions.

113. There is nothing said about the authority which should prepare the budget for the consideration of the Senate; nor any provision made about the right of the Senate to make any modifications of the budget, as presented to that body, on the side of revenue or expenditure. It is, presumably, the Syndicate which frames the budget, and the Senate formally

accords its sanction by passing it. It is also the Syndicate, presumably, which makes changes, if any be needed, in the various items on either side of the budget, and makes re-appropriations from one head to another of expenditure, if such a course be necessary, though presumably the theoretical right of the Senate in this behalf would not be questioned in practice. There is no instance of demands for supplementary grants having been presented to the Senate, in the course of the financial year (which begins on 1st April of the year and ends on the 31st March of the next calendar year, while the academic year begins on 1st June and ends on 31st May), nor of any votes for reappropriations. With such powers over the University purse, the Senate cannot wield any effectual authority over the affairs and concerns of the University, or over its general policy and daily administration. It may be added that the University, as at present constituted and functioning, has no very great financial resources at its disposal; and so its nominally supreme governing body may not miss much of power and influence, simply because of the lack of adequate financial authority. Nevertheless, if the University is to develop a real sense of autonomy and responsibility, and its functions and utility for the benefit of the Province, it would have to be furnished with more adequate financial resources to meet its requirements, and vested with more considerable powers to manage its finances in a responsible manner in its own way.

114. It is not even clear that the Senate is the only body entitled to lay down the general policy with regard to the University, or problems of higher education in general, throughout the Province. If we review critically the actual composition of the Senate, under the present Act, we cannot help feeling that it is a body consisting only nominally of an elective majority. In reality, the officers of Government, whether coming as *ex-officio* members, Life Members, or those frankly nominated, or whether as those elected as Representative Fellows, will predominate to the extent, perhaps, of two-thirds, if not more, of the total membership of the Senate. Given this composition of the Senate, it is difficult to imagine how such a body can be independent enough to go counter, if necessary, to the accepted policy of the Government for the time being.

115. The functions assigned to the Senate are thus of a subordinate rather than of an initiative character. From the mere

right to pass the budget, apparently without any statutory provision for the discussion, modification, or alteration, on either side of the balance sheet, to the prescription of courses of, and general policy in regard to, studies, the Senate is intended—reading the letter of the law—to function rather as the echo of the Syndicate than on its own authority. The Senate cannot, except by an extraordinary procedure which it has never adopted, review any act of the Syndicate done in the exercise of the powers vested in that body by the Act, or the Regulations, in regard to the following matters, namely, appointment of members of Faculties, the Boards of Studies, prescription of the procedure for Faculties or other Boards, determining the quorum of members in committee for the regular transaction of business, appointment and removal of examiners and determination of their duties and powers, prescription of text-books, and general discipline and control of the students of the University. It has, of course, no powers to hear appeals from any admitted institution, the teachers or the students, and so it acts as a mere appendage, without any use or purpose, end or aim.

116. We consider it necessary that the constitution and powers of the Senate be recast in all these respects, so as to make it more democratic in its composition, and better able to enforce the responsibility that the executive bodies in the University owe it. The Senate should be made, beyond the possibility of question, the supreme financial and policy-making as well as law-making authority in the University. It must be vested with adequate powers and resources to make good its wishes, and to carry out the changes implicitly or specifically made under these recommendations. The influence of the Provincial Government in the administration of University affairs should be reduced, by Government making over to the Senate all the funds which it now spends on University education through the colleges maintained directly by Government, or aided by them; and such other resources as may be deemed necessary for carrying out the changes suggested by us. The Senate should, likewise, be made the final authority for all these disbursements, as also for the institution of new Chairs or Departments in the University, for the admission of new colleges as constituent or affiliated members of the University, and as a final appellate authority within the University in regard to any dispute concerning pay, promotion, or discipline of the University staff, whether academic or administrative.

117. It is possible, indeed, that if the Government is divested of the present responsibility which the University authorities owe to the Provincial Government, they may feel themselves absolved from any concern—financial or otherwise—regarding the successful and progressive working of the University. As the supreme executive authority in the Province, as the chosen and responsible Ministers of the popular will, as trustees and custodians of the rights of unborn generations, Government, however, cannot disown all interest or concern in the affairs of the University. Much less can they adopt a semi or sub-consciously hostile attitude towards a body like the University. But their ability materially to assist the University is necessarily limited; and their capacity really to understand the problems which confront an organisation dealing with the highest branches of learning, science, or technique is still more so. As far as we can see today, the financial resources placed at the disposal of the University by Government are not likely to be so considerably improved as to enable it to discharge those varied functions, and carry on the wide activities, which we consider as rightfully belonging to this organisation that ought to be carried out to the best of its ability. The autonomy and independence of the University organisation would be largely illusory, if it is crippled from the start for want of funds.

118. We would, therefore, recommend that the University should be given some form of permanent endowment by Government, and such other interests, individuals, or organisations in the Province, as have a particular reason of their own to desire the University to be independent, autonomous, and progressive. If Government feel themselves absolved from any sense of concern for the well-being of the University, merely because it has a limited influence in the working of the University, and that the University administration is based on the principle of internal autonomy and responsibility, they would be taking a needlessly narrow view of the function and place of the University in the daily life of the people. Government, we fully recognise, will have heavy and varied demands of the most elementary kind upon all the resources they can possibly mobilise to make up the leeway we have to cover in all social services, like the universal provision free of cost of the Basic education, or improve the range and character of secondary education. This, we admit, would reduce their power, whatever their desire, to aid the University substantially in the initial endowment. Nevertheless, we hold it to be but right and proper that Government should aid the University as much

as they can in securing the initial endowment; and yet not insist upon any curtailment of the University autonomy as a *quid pro quo* of the arrangement.

119. Our recommendations, besides, do not tend, taken collectively, to the complete elimination of all Government influence in the constitution and working of the University. All that we have suggested is that official influence should be reduced, and be restricted to the real concern of the people for which Government are trustees, and which the University may possibly otherwise ignore. Government, it must not be forgotten, are the only power to frame or alter the entire constitution of the University. Through the colleges now maintained by them, they would have considerable influence in all University bodies, even when the maintenance and administration of these colleges is transferred to the University. They must also recognise that the University is, in the cultural life of the people and its moral or mental growth, what Government themselves are to the ordinary administration of the material resources of the Province. The two have thus concurrent interests, and the autonomy of the one need not prejudice in any way the influence or authority of the other. Accordingly, subject to the ultimate authority remaining in the hands of the executive Government, which can alter the very fundamental constitution of the University, and provide a nucleus if not the bulk of its resources, Government ought not to feel aggrieved in any sense, if the democratic principle is extended to and applied in the working of the University; and a sense of real responsibility of its executive to somebody within its own structure is also included in the new constitution of the University.

120. At present the Senate meets twice a year, and disposes of its agenda in a few hours each time, so that the real work of the University is carried on by the Syndicate. That body meets once in every month, and has all sorts of academic, administrative, and disciplinary matters to consider and dispose of. The academic element, particularly of a specialist type, is not excessively or even adequately represented on the Syndicate, especially in view of the functions it is charged with. The fullest appreciation of academic matters is thus not assured, either in the Syndicate or the Senate, which is really little better than a record office of the Syndicate. On the other hand, in view of the heavy weight of the official element on that body, such matters as the discipline and welfare of students are apt to be considered rather from an administrative angle than that suited to an academic authority.

121. The Syndicate, under the present Act, is the executive of the University, and consists of nineteen members, including the Vice-Chancellor. Two of these members are *ex-officio*, namely, the Vice-Chancellor, and the Director of Public Instruction; four nominated from among the Principals and the Professors of the colleges by the Chancellor; and twelve are elected, of whom five are to be members of the staff of a college affiliated (admitted) to the University, and seven persons not members of the staff of any college or school.

122. This means that there is a considerable official element in the Syndicate, and that any democratic control or influence over the Syndicate is not, under the constitution, very effective. Responsibility of the Syndicate towards the Senate, or any other body in the University, is not expressed anywhere in the constitution. Its members have no collective responsibility; nor are their seats open to being affected by any vote in the Senate. Sub-section 2 of section 8, defining the powers of the Syndicate, is very briefly worded, and is to be read in addition to the powers given by inference to this body by section 7, sub-clause 3.

123. We consider that the executive authority in the University, the Syndicate, ought to be compact, and at the same time representative enough to assure both expedition in transacting the business of the University, and commanding sufficient confidence of all the various interests, departments, or bodies, affected by the activities of the University. The present number, 19, in view of the extension of the functions of the University, and a proportionate increase in the numbers of its *alumni*, as well as the variety of questions to be dealt with, may however, not seem too large. A certain amount of internal division of work, e.g., by means of standing committees of the Syndicate for its several functions, adjusted by the Syndicate itself for its own convenience, would necessitate a fairly good number of members.

124. The Syndicate should be, we think, mainly elective. We suggest that the Vice-Chancellor and the Directors of Education of Bihar and Orissa should be *ex-officio* members; eight members should be elected by the Senate from among its own members, not on the staff of any school or college; and seven more by the Academic Council from amongst its own members, in all eighteen. The Vice-Chancellor will, of course, be the chairman of this body.

125. To introduce the principle of responsibility, as between the executive and the legislative authorities within an organisation like the University, is not a mere imitation of the similar features of political institutions in a democratic country. A university is not only entrusted with very considerable powers of self-government, including powers of taxation; it is also a body with wide, long-range functions, which may affect the present, as well as future generations of the Province. The interests of large sections of the community are also involved in the policies and decisions of the University, which may have a prejudicial effect on their distinctive culture. The executive authority within such a body should, accordingly, own a degree of responsibility to its legislative counterpart, which, at present, it, in effect, owes to the executive Government of the Province in a variety of ways, though perhaps not in so many words. The autonomy of the University will not be fully and truly established, unless and until the ultimate responsibility of the University administration is transferred from the executive Government of the Province, as at present, to some body or authority within the University itself. Then only will the University come to be regarded truly as the *alma mater* of the entire population in the Province; and become a real, living force in shaping the people's ideas, guiding their aspirations, and helping them to realise these in daily life. The Syndicate should, accordingly, be responsible to the Senate in all matters of policy, and be bound to carry out all the resolutions of the Senate on such matters of policy.

126. We have no desire to multiply the bodies and authorities in the University frame-work. In view, however, of the great probability of the increased range and variety of University functions, and of the numbers of its *alumni*, the Senate, with its supreme functions of prescribing the basic policy for all University bodies and authorities, managing the properties and finances of the University, and exercising generally revisory or supervisory powers over all University bodies and authorities, officers, servants or students, may feel itself too heavily charged with duties to be able to discharge its academic functions satisfactorily. The nature of the Senate's relationship to most of the colleges, which become constituent parts of the University, would, under our recommendations, also change radically, and so add to the volume of work before that body. The number of University students and departments will also increase enormously, if and when the scheme of educational reorganisation, we have proposed, comes fully into operation. The Syndicate, also, would be, for

similar reasons, heavily burdened with duties and responsibilities. If these considerations weigh with the supreme authority in the University, it may well be empowered to set up, by appropriate procedure, a distinct and separate academic body, charging it with such functions and vesting it with such powers and authority as may be deemed proper. Such a special body set up to look after purely educational matters, may be styled the Academic Council.

127. The strength of the Academic Council, by whatever name that body is called, should depend upon sets or groups of subjects, the number of institutions of the collegiate degree constituting the University, or recognised, admitted, or affiliated by the University, and the heads of its postgraduate departments. Every head of a department of the University ought automatically to find a place on the Academic Council. Heads of Faculties or representatives of the Boards of Studies, conveniently grouped if necessary, should likewise be on this body. A proportion of additional members may be elected by the governing and executive bodies in the University. The Senate as a whole may elect a small number, as also the Syndicate, so as to make the Academic Council truly helpful in academic matters, and yet not unmindful of policy or administrative requirements.

128. The total strength of this Council may be fixed at not exceeding 30; and members may be elected from a variety of constituencies somewhat as follows:—

- |                                                                                                                                                                   |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| (a) The Vice-Chancellor and Deans of Faculties,<br><i>ex-officio</i> .                                                                                            | 7  |
| (b) Members representing Boards of Studies<br>and elected by the Boards, or groups<br>of Boards concerned.                                                        | 10 |
| (c) Members representing the Senate elected by<br>the Senate.                                                                                                     | 5  |
| (d) Members nominated by the Syndicate to the<br>Academic Council.                                                                                                | 3  |
| (e) Members elected from among the Fellows<br>representing Orissa in the Senate of the<br>Patna University, whether <i>ex-officio</i> ,<br>nominated, or elected. | 5  |

This number may vary within the maximum limit of 30, if one and the same individual happens at a given time to be both Dean and elected member representing the Boards of Studies, the Senate or the Syndicate.

129. The Academic Council should be entrusted with the prescription of the courses of studies, laying down text-books, defining the degree of proficiency in the practical training afforded, suggesting names for appointment of examiners to the executive authority; association with the Syndicate in recruiting the superior teaching staff for the various institutions in the University, or those conducted by the University; in the periodical inspection of the affiliated institutions; and in the general supervision over the several institutions started by the University, or aided and supervised by it, such as gymnasia, libraries, museums, laboratories, workshops, etc. In matters purely academic, this jurisdiction should be final, subject to the right of the Senate to prescribe the basic policy; and of the Syndicate to give executive effect to the decisions of the Academic Council. In other matters, its functions should be consultative and recommendatory.

130. Even though an Academic Council is to be constituted by law, the Faculties must remain. The Senate may determine, from time to time, the number of the Faculties, setting up new ones and removing the existing ones as it deems proper at any time. The functions assigned to the Faculties would, ordinarily, consist of recommending courses of studies and text-books, or books suggested for reference, and giving their opinion on any academic subject referred to them by the Academic Council, the Senate, or the Syndicate, as the case may be. Two or more Faculties may hold joint sittings, if the questions to be decided cover common ground between them.

Under our recommendations, the constitution of the Faculties should be determined by the Senate. Fellows of the Senate may be assigned by the Senate to several Faculties, according to the academic qualifications or experience of each Fellow, and in accordance with the requirements of any particular subject entrusted to a Faculty. It need not, however, be absolutely necessary to assign each and every Fellow to some Faculty.

In addition to the various powers assigned to the Faculties by the Senate, the Faculties may be entitled to co-opt additional members, not exceeding half the number assigned to each of them by the Senate, in accordance with the requirements of the particular subjects within its jurisdiction.

The co-opted members of the Faculties have the same right as Fellows assigned to a Faculty by the Senate, except that no co-opted member should be eligible to be Dean of the Faculty.

131. The Academic Council would necessarily have to meet more often than the Senate, though not as frequently as the Syndicate, which has to carry on the executive administration of the University. It may need to have a special presiding officer of its own—a Rector, or a Prefect of Studies—apart from the Vice-Chancellor, who, if present at Academic Council meetings, will preside there; but in his absence the Rector or the Prefect of Studies—whatever the title—should preside. This officer need not be an additional burden on the University purse, as the work of his office will not be too onerous, and can be easily discharged by one of the senior Principals of the constituent or affiliated colleges, who will be *ex-officio* members of the Senate. The term of office of the Rector or Prefect of Studies may be fixed at two years. If the principle of rotation is established, so that each Principal of an affiliated or constituent college may have his turn, there would be neither jealousy nor lack of experienced personnel.

132. The actual work of teaching, or rather prescribing or recommending courses of study, is at present performed by the Faculties. There is no mention of the Faculties in the existing Act of the University, except in an indirect manner, in section 7(3)(a), where the Senate is debarred from reviewing any act of the Syndicate in the matter of appointing members of Faculties. Authority, however, is given by Regulations for constituting and defining the powers and duties of Faculties. The Regulations relating to the Faculties (chapter 6, on page 36) provide for six Faculties, namely, Arts, Science, Law, Education, Engineering and Medicine. The Faculties are subordinate to the Syndicate which assigns Fellows to them, though any Fellow is entitled to propose additional names of Fellows for assignment to any Faculty. At the annual meeting of the Senate, election from among these names, thus proposed, takes place. No Fellow can be appointed to more than two Faculties at the same time.

Other matters of the kind may be referred to the Syndicate or the Senate. On its own motion, a Faculty is entitled, by Regulation, to make recommendation to the Syndicate in all matters relating to University examinations, courses of study, teaching, and research in the studies or subjects with which it is concerned, and may even propose additions or amendments to the Regulations relating to these matters.

These functions, however, do not indicate any wide range of authority even in matters of direct teaching; and much less,

of initiative for new departures in teaching, instruction, or personal guidance. This is left to the colleges, as already remarked. We shall, therefore, review the authority and concern of the University in regard to colleges in the next chapter.

133. The basic policy, of course, must in every case be laid down, for all University bodies, by the Senate only. But in initiating questions of policy a certain pre-eminence may be given to the Syndicate, so far as the matter in question is of an administrative kind; and to the Academic Council, in so far as the matter in question relates to instruction, guidance, examinations, etc. This does not mean that the ordinary members of the Senate, who may not be members of either of these two bodies, would be excluded from having their right to initiate discussion on any matters of policy. Nor does it mean that the Senate should be in any way restricted, and its authority to pronounce upon any category of problems relating to the governance and administration of the University curtailed. We mean the Senate to be the real, effective, supreme governing authority in the University, and not a *primus inter pares*. It must be the final arbiter and court of appeal in all cases of dispute or differences of opinion between any two University authorities, officers, or bodies. There must be no other co-ordinate authority in the University with a statutory right to challenge the decision of the Senate. And, of course, there must be no overriding authority, in or outside the University, to set aside the decisions of the Senate, except, of course, the High Court, and the Provincial Legislature.

134. The constitution and functions of other authorities or bodies in the University should be left to the supreme governing body in the University, namely, the Senate. This body should be given the fullest possible powers to set up, lay down the functions of, guide, control, and dissolve, if necessary, all other bodies, which may be needed at any time, in the opinion of the Senate, to carry on any set of functions specially assigned to such a body.

135. Boards of Studies may be set up by the Senate by its own authority; or it may empower the Academic Council to do so, as and when, and in such number, as it may think necessary at any given time. The Boards of Studies, constituted by Chapter 7 of the Regulations, are subordinate to the Faculties in their respective spheres. They make proposals for syllabuses for prescribed courses of study, for the guidance of the Faculty concerned, who will circulate the same to the Chancellor and Fellows and additional members of Faculties for such remarks as any of them may wish to offer.

These remarks, when received, are forwarded to the Boards concerned. In the March meeting of the Faculties, the Boards of Studies express their opinion together with their remarks, and these, along with the opinion of the Faculties, are forwarded to the Syndicate. We make no recommendations to alter these existing arrangements substantially.

136. The Boards of Studies, would, no doubt, be subordinate bodies. The Senate would naturally reserve the right to review and confirm the decisions of all such subordinate bodies in matters of basic policy, or may delegate this right to the Academic Council. In any event, it must retain the right to alter and modify the decisions of any subordinate bodies if it should deem proper.

137. Other authorities or bodies in the University, such as a special Publications Board, a Postgraduate Board, or a Students' Health and Welfare Committee, and the like, are matters of internal economy, to be adjusted as they like, by the University administrative authorities themselves. The constituting Act as such need not concern itself with the organisation, in meticulous detail, of any of these bodies; and should content itself with an omnibus clause authorising the Senate, as and when it thinks fit, to set up any such body for any particular activity that it at any moment requires the services of such a special body within the University to perform.

138. A central board is instituted by section 13A of the present Act consisting of the Vice-Chancellor and each Principal of a college at Patna, together with eight members appointed by the Senate from the governing bodies of these colleges, to arrange inter-collegiate lectures, promote the health and welfare of the students, and encourage corporate life amongst them. It is made expressly subordinate to the University. But this authority seems to be of very little effective utility, from the point of view of moulding the University policy, general administration, or the cultural advancement of the Province; and need not be reproduced in the new constitution.

139. In the constitution of these bodies, care must, of course, be taken by the Senate to see that all important and appropriate interests are duly represented. The Senate will, accordingly, have to make rules or statutes regulating the procedure for the establishment, constitution, and functioning of such bodies, including the elections to them; and their general method of working. Once established in this manner, the Senate should not, ordinarily, interfere with the conduct of the business assigned to them, unless grave occasion

arises to review, modify, or reject the decision taken by any of these bodies, or even to modify their constitution. For this purpose a special procedure will have to be provided, once again by Statutes or Regulations of the Senate itself; so that no hasty, ill-considered, or improper judgment may be pronounced, and its consequences have to be borne thereafter.\*

140. Rules will also have to be made by Statute or Regulation of the University for deciding cases of conflicts, should any arise between bodies of more or less co-ordinate authority, even though, in theory, one is subordinate to another. Thus in the event of any dispute arising between the Academic Council and the Syndicate, for example, in any case where their jurisdictions overlap; or even as between the Senate and any of the subordinate authority, some machinery will have to be provided, for an expeditious and economic solution in these cases of conflict, or disputed authority. We recommend that the Senate be given power, by the constitution, to make its own laws or Statutes for disposing of such matters. It should likewise act as an appellate tribunal to consider and decide upon any complaints, or grievances, that the University staff, students, or even members of the general public may have against any particular University authority, college, or body, or even in regard to the Senate's own decision. Such a standing committee for appeals may be quite easy to provide on the lines of a special body of the Senate, which may also dispose of questions of privilege, election disputes, matters of discipline relating to the staff and the students, and the like, which would inspire general approval and confidence, and at the same time avoid any chance of injustice to the body or individual complaining. An appeal may also be permitted in extraordinary cases to the supreme authority as a whole within the University; though, we think, that such cases should be confined to the minimum, if any be permitted. Assuming that the University is and must be an autonomous body, all cases relating to its own functions should, we think, be capable of being finally disposed of by some authority within itself; so that any suggestion about a higher appellate authority beyond the University's own bodies, could be avoided.

141. By section 14 of the present Act, new Regulations of the University are made by the Senate, which is also entitled

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\* Modern terminology distinguishing the several kinds of rules made by the different university authorities, describes Statutes to be rules made by the Senate; Ordinances to be those made by the Syndicate; Regulations to be those made by the Academic Council and Rules or Resolutions by all other bodies. In our recommendations, this practice has been generally followed.

to amend or repeal existing Regulations. But it is not clear who made the original Regulations. Changes in Regulations are made usually on the recommendations of the Syndicate, but all changes in new, additional, or modified Regulations must be previously sanctioned by the Local Government, [section 14(4)] which is entitled to sanction, disallow, or remit any proposed Regulation for reconsideration by the Senate. The scope of the Regulations is defined both imperatively and permissively; and they are made co-terminous with the scope generally of the University Act.

142. The division of functions as between the various authorities mentioned above should be made in accordance with the general character of the work assigned to each such authority. Rules made by the Senate, the Syndicate, or the Academic Council, as the case may be, will provide, according to the nature of the work entrusted to each, for the functions of each such body, and their general supervision and control by the superior authority. It is unnecessary for us to go into the details of these functions beyond the general remarks just made.

143. The University must, likewise, increase its activities so as to be of direct interest to the mass of the people, by extension lectures, adult education classes, special vacation schools, radio talks by University teachers on matters of public interest and concern, exhibitions of University work, museums of collections made by its teachers and students, demonstrations of technical advances in science or technique and the like, which cannot but add to the popular regard for the University.

144. The public also must be made to take a more real interest in the affairs, administration, and progress of the University, by some form of direct contribution towards its expenditure. This alone will make the contact real and effective. Distinguished leaders of public opinion must, likewise, contribute in kind to the activities of the University, by lecturing or demonstrating work in their respective fields under its auspices; by setting specific problems for solution by the University to be worked out in its laboratories, etc., by organising tours of inspection of their works, facilitating practical training of promising students in their particular field of work, and in a number of other similar ways. A University Bureau for securing employment to its duly qualified *alumni* will be an obvious example of this kind; and the instances can be multiplied to any extent, if only there is the will to serve the public.

## CHAPTER IV.

### COMMENCEMENT OF UNIVERSITY EDUCATION.

145. The principal function of a university is, we have premised, to afford education and training in all human sciences and arts that can conveniently be managed within the resources of each university, and according to the requirements of the population of the area served. To achieve this, the most important problem at the outset of university work is to consider the qualifications or preparatory training needed for admission of students to the university studies. Entrance to the university is made usually dependent on passing successfully the Matriculation examination, or some other test corresponding thereto, which provides general, literary, or academic training in scientific subjects. We shall see hereafter more in detail the kind of education candidates passing the Matriculation examination of this University may be deemed to have received. Here it is enough to add that, given the reorganisation of secondary education in this Province in accordance with the recommendations made by the Committee; given the wholesale diversification of that grade of education in accordance with the requirements of the Province and the aptitude, inclination, or convenience of the various individuals desiring such superior grade of education provided through courses of training and education divided into a variety of practical, optional, or technical education and training, we shall have to revise radically our conception of the pre-requisites of university education among those seeking admission within its portals.

146. The usually uniform unpractical education nowadays afforded to students going up for Matriculation examination would have to be radically reconsidered. The Matriculation examination may be assumed either to mark the end of the secondary stage in education; or the beginning of more advanced and specialised training. In the former case, the test or examination must be at least as varied, as full and complete as would be needed, not only to meet the specialised requirements of all the various arts and crafts and occupations trained for in that stage of education, but also afford some proof or certificate of the personal character and aptitudes of the individuals seeking, after finishing such education, to enter the struggle for existence. If, as is the present practice all over India, the latter is the predominant character of the Matriculation examination, then we must design an alternative test to meet the former category of requirements. The

alternative examination, giving the final certificate as it were on the successful completion of the secondary stage of education, must contain a limited number of subjects of general education, and a large variety of optional subjects, so as to embrace all possible kinds of secondary schools which should be preparing candidates in their respective branches of arts and crafts and occupation. The basic outlook which would govern the organisation of secondary education, under our recommendation, in a variety of practical or technical branches in accordance with the needs of the Province, as well as in accordance with the aptitude, convenience or inclination of the individuals studying, is fundamentally different from the outlook which has hitherto governed the organisation of studies and training for the traditional Matriculation examination.

147. Even if we reconstitute the Matriculation examination, we must realise, that so far as the function of the university is concerned, the emphasis will have to be laid predominantly on the literary subjects, or subjects of a scientific character in their academic aspect, rather than upon the technique or practice of such sciences even when they are capable of practical application. The university trains people in higher branches of science and learning of all kinds, and not only with a view to earning a livelihood by the practice of a given art or science, profession or occupation. Hence, for an adequate preparation for such studies in their higher ranges, it is necessary that the candidates should have, throughout their secondary education, a training and education directed to the academic or theoretical aspect rather than the applied or utilitarian view even in scientific subjects; while, in subjects of a literary or general nature, there would naturally be little regard to practical utility.

148. It may, therefore, be that some university entrance test, whether identical with the present Matriculation examination, though suitably modified in respect of the range of subjects for examination, and the standard of passing so as to choose only those who would really be suitable for higher studies in the University; or a fresh additional test devised by the University itself for its own purposes, will have to be organised, as the end of the secondary education will have to be marked by a test certainly different from that nowadays found in Matriculation. Notwithstanding the universal, compulsory basis recommended by us in so far as primary or

Basic education is concerned, those going in for secondary education of the very varied and practical nature that we have recommended in another section of our Report, will be a relatively small fraction, perhaps not exceeding 10 per cent of the total number of children in the Basic education stage. And of those who go in for secondary education, we believe that not more than 10 per cent would choose or be able and qualified for university stage, and its more abstract, academic or scientific studies leading up to research, or the higher professional or technical qualifications even in applied science.

149. University education should, indeed, be not one-sided. Even though of an academic or abstract character, whether in Science or Arts, it will necessarily have to include specialised, practical, vocational, professional, or technical branches of education and training, to do justice, not only to its name and ideal, but also to the requirements, material as well as cultural, of the Province as a whole. For an adequate preparation to study these advanced technical or professional branches, the university must require any test it imposes for admission to its portals to guarantee an adequate preparation or foundation. A general development of the mind, sufficient to understand technical subjects, or those of a professional nature, or even advanced humanities and abstract science, facilitates the task of the university, for building the super-structure very considerably. An all-round general education and training, with an elementary knowledge of each specialised subject, whether technical, vocational or professional, that the candidate seeking admission into the university desires to prosecute further, would suffice, to the university, for judging whether or not those seeking admission are qualified for carrying on such studies.

150. The University may, accordingly, organise its own test, if it does not find the Matriculation examination, or an examination hereafter organised to mark the end of the secondary stage of education, to be quite sufficient for its purposes. Under the recommendations we have made in another part of our Report, we consider it both necessary and advisable for the University to organise its own separate and special admission test. The traditions associated with the name of Matriculation, and the hall-mark it is supposed to give, will die a hard death. We need not start the re-organised University by abolishing the Matriculation, or merging it in the secondary school-leaving test, though that we

consider to be the end of our main recommendations. In the commencement, therefore, the entrance test would be in addition to the Matriculation or secondary school-leaving certificate examination. It should be open only to those who had passed only the former examination, or studied up to the end of the secondary stage in subjects or branches prescribed for the purpose by the University, together with a certificate regarding the fitness of the candidate from a responsible head of a recognised secondary school. As the University is an autonomous body, this solution would be not only most in accord with its own responsibilities as a semi-independent authority, but would also simplify the task of the authority concerned principally with the secondary education in the Province. If the latter is freed from the obligation to provide for the needs of the University, it would be more free to develop its own line of action with regard to the test, or series of tests, it may organise to provide a sufficient basis for imposing its hall-mark upon those who pass that stage satisfactorily in the several branches of practical or technical education and training imparted in the secondary schools.

151. We are, accordingly, in favour of the University holding its own entrance test, whether in addition to, or in substitution of, the present Matriculation examination. If the University holds its own entrance test, it would have to lay down its own requirements from the candidates presenting themselves for such a test, in regard to the subjects studied and the degree of proficiency expected. It may be mentioned, in passing, that even if the present Matriculation examination is wholly done away with for candidates admittedly not going in for the ordinary secondary school-leaving examination, the University entrance test may be called by the name of Matriculation. But it would have to be confined to the class who are definitely resolved to enter the University, and prosecute their studies and training to the highest stage in the university. It would leave unaffected the general principles of organising secondary education in its varied form, as we have recommended, either section being free to choose its own line of action.

152. It must not be forgotten that the secondary school-leaving examination will have to serve the function of providing a dependable certificate for those who seek an accepted hall-mark of their fitness, bodily and intellectually, to take up practical work in life, for which their studies have qualified

them during the course of their secondary education. For this purpose, not merely consideration and guidance, but also practical experience may have to be provided for those completing this stage of their education, submitting to the final test, and desiring to enter the struggle for existence. An examination, which considers principally the desirability of giving such a hall-mark to any particular individual for any specific vocation, occupation, or activity, has its own limitations and handicaps to serve as an entrance test to the University. And, therefore, we think it is in the fitness of things that the University should have its own separate examination to judge of the fitness or adequacy of preparation for its higher studies among those that present themselves for admission.

153. Even if the University, however, has its own separate examination for judging the fitness of those who desire to enter its portals, it does not follow that it would be entirely absolved from the task of generally shaping the policy governing education and training in secondary institutions. These matters have a bearing upon one another, so that the University must be allowed a voice in shaping them. We should not consider the University and secondary schools to be living in exclusive, water-tight compartments. We have accordingly, allowed in another section of our Report, adequate representation and influence to the University in initiating its general policy in regard to secondary education, through the special Board of Education placed in charge of the department. The courses of study, the methods of teaching, the qualifications of the staff, the nature and extent of the equipment provided in the institutions affording secondary education and training, will all come under the review of this Board, which will make its own Regulations under the Education Code for ensuring a minimum standard of requirements in this behalf. On the other hand, the Government, representing the general population of the Province, and the tax-payer who provides the bulk of the funds needed for education up to the secondary stage, and to maintain institutions which provide that education, would also have some influence in shaping the general policy governing such institutions. The University cannot be expected, from its own resources, to provide all the institutions, equipment, staff, and buildings needed for such a vastly varied secondary education, as we have suggested in our Report dealing with that subject. Hence, it would be improper and unfair that the University authorities should be given sole

control over secondary education in all its varieties and for all its purposes and problems. The two authorities must, accordingly, collaborate to make a proper supervision, control and guidance of the institutions concerned with secondary education, and also for the respective tests imposed at the end of the courses of secondary education.

154. At the present time, the Regulations in regard to the admission of students to the University given in part III, chapter XIII *et seq.* require a register of all students in the University, including graduates reading for a higher examination, to be maintained by the Registrar. No one is admitted on this register unless he has passed the Matriculation examination of this University, or an examination recognised by its Syndicate as equivalent thereto. Nor can any one be deemed to be a University student unless his name is in the register where only University students figure. Those who have passed a corresponding examination in other provinces, or have otherwise obtained qualifications considered to be similar to those required for entering names on the register of students of this University, may, if the Syndicate permit, be exempted from this rule. The register contains the date of the admission and of leaving any college, every pass or failure in a University examination together with the roll number, the record of any scholarship, medal or prize that the student may have gained or obtained, and every degree or distinction taken by the student.

155. One of our members holds the view that, as a rule, the secondary school examination should be considered a qualifying test for entrance to the University, but the University should, if necessary, test the suitability of candidates who have taken particular groups of subjects at the secondary stage for admission to particular courses at the University. If the courses for preparing students for University, as envisaged by the Committee in the section dealing with secondary education, are drawn up in consultation with the University, there may be no need of having a separate entrance test of any form at all. The recent change of the medium of instruction makes it possible to effect certain changes in the Matriculation course which will be very useful to those who want to proceed to the University. The post-middle stage course at present extends over a period of four years of which only two are devoted to the study of the Matriculation course. Formerly, the two years of the pre-matriculation classes were devoted to the recapitulation through

the medium of English, at least in some subjects, of what the student learnt at the middle stage. That was with a view to improving his knowledge of English. This necessity does not exist now. But even today one finds a student learning things twice over. For instance, the history of India is taught in the VIII and IX standards, and again in the Matriculation classes (X and XI standards). Much of geography is also common. Portions of the course in mathematics are also more or less, the same as in the middle stage. Further every student is compelled to take mathematics, although he may not need it for his studies at the University, that which he needs for his day to day use, having been already learnt by him either at the secondary stage, or in the two pre-matriculation classes.

156. If suitable changes are made in the present courses, a student may have a better grounding in the subjects which are needed for a proper understanding of the course he wants to take up in the University; and he will not be deprived at the same time of the general knowledge that he should possess and does get at present by following the Matriculation course. Four years' training with the vernacular as the medium ought to enable him to attain a higher standard than he does now, if only repetitions are avoided, and the subjects meant to be studied for the Matriculation examination are re-grouped so as to provide more options suited to the requirements of the special course he intends to take up in the University. After having read history, geography and mathematics in the VIII and IX standards, he should not be compelled to take these subjects again compulsorily for the Matriculation examination, unless he wants to take them up or a connected subject in the University also. It may, therefore, be suggested that, for the Matriculation examination, only the vernacular, and English, and possibly also a little of the classical language connected with his vernacular, should be compulsory subjects. For other subjects, he should have the *option* to choose such, or such groups of them, as will be distinctly helpful to him for the pursuit of the course he intends to take up in the University. For instance, there may be a history group, a science group, a philosophy group, a commerce group, etc., one of which the student may be asked to take up in addition to the compulsory subjects.

157. Any intermediate college or high school in Bihar and Orissa, which is approved by the Board of Secondary Education, should be allowed to send up students for the Matriculation examination. But such candidates must have

studied for at least one year immediately preceding the examination in that or any other approved institution in the courses prescribed for that purpose.

158. Even if the studies have been conducted for less than a year, in one or more of the institutions in the Province approved as required, a candidate nevertheless may under the existing Regulations be admitted to the examination, if an appropriate request is made by an officer of the Board, duly authorised for this purpose, and with the special permission of the Syndicate in that behalf. The same applies to any intermediate college or high school in the district of Angul, or in the Orissa States; and the same exception also applies for admitting those who may not have completed one full year of studies before seeking admission in that examination, with the special request of the Director and special permission of the Syndicate. All high schools, which were recognised for this purpose from the 1st of October 1917 in Bihar and Orissa, including the district of Angul and the Orissa States, are entitled to send up students for the Matriculation examination even now, unless the privilege has been specially withdrawn by an appropriate procedure. High schools in Nepal and the Rajkumar College, Raipur, are similarly privileged to send students for that purpose.

159. Students, who may not have studied at any college at any time during the year preceding Matriculation examination, may, nevertheless, be admitted as private candidates to that examination, if, before appearing at the examination, they have passed the preliminary test held for the purpose by the Inspector of Schools, or under his orders, and satisfactory evidence is produced before the headmaster of the school at which such preliminary test is held, that a regular course of studies for one full calendar year has been prosecuted within the Province, and that proper discipline has been observed. Even these conditions are not necessary in regard to women students, who are allowed to appear as private candidates without complying with the clauses requiring regular studies at recognised institutions.

160. The Matriculation examination under the existing Regulations of this University, is "a general test of fitness for a course of university studies". More particularly it is a test of (a) ability to write correct, simple, clear English, and (b) intelligent comprehension of plain modern English on familiar subjects. The examination is conducted by means of

written question papers, and is held at different centres in the Province where the same papers are set, in the same subjects, and on the same day. The subjects to be studied are :—

1. English ... .. 2 papers.
2. Mathematics ... .. 1 paper.
3. Any one of the following :—  
     Sanskrit, Pali, Arabic, Persian,  
     Greek and Latin, Hindi, Oriya,  
     Bengali, Urdu, French, Italian,  
     German, or, as an alternative,  
     elementary physics and chemistry 1 paper.
4. Composition in one of the following languages—  
     Hindi, Urdu, Oriya, Nepali or Bengali 1 paper.

Instead of a second language as provided in (3) above, all the aboriginal candidates other than those coming from Anglo-Indian schools are allowed to offer an additional paper in English, in lieu of the subjects mentioned in (3), and women may also offer any other language with the permission of the Delegacy.

If the mother-tongue of the candidate is not included in the five languages mentioned in (4), an alternative paper in English composition is allowed as a concession; but the concession does not apply to those who offer an additional paper in English as in group (3).

5. History of India and England and geography. 2 papers.
6. One of the following additional subjects :—
  - (a) Additional mathematics ... 1 paper.
  - (b) Paper of higher standard in the following languages, namely :—  
     Sanskrit, Pali, Arabic,  
     Persian, Greek and Latin.
  - (c) Paper in one of the following languages if not offered already as subject for (3), namely,  
     Hindi, Oriya, Bengali, Urdu,  
     French, German and Italian. 1 paper.
  - (d) Elementary mechanics ... 1 paper.
  - (e) Elementary physics and chemistry, if not already offered as a subject for 3. 1 paper.

(f) Commerce, including book-keeping, commercial arithmetic, commercial correspondence and commercial geography.	1 paper.
(g) Agricultural botany ... ..	1 paper.
(h) Music ... ..	1 paper.
(i) Domestic science ... ..	1 paper.
(j) Drawing ... ..	1 paper.
(k) Manual training ... ..	1 paper.

Each paper is of three hours' duration, and carries 100 marks, except music in which there is a written examination on the theory of music, carrying 30 marks of one hour's paper, and a practical test in vocal and instrumental music, carrying 40 and 30 marks, respectively. In domestic science also, there is a written paper of  $2\frac{1}{2}$  hours with 75 marks and a practical oral test of 25 marks. In the English paper under the first head, there must be passages for translation in one of the following Indian languages, namely, Hindi, Urdu, Oriya, Bengali and Nepali.

161. For passing the examination every candidate must obtain 75 marks in English, 36 marks in composition in an Indian language, or in the alternative paper, 30 marks in second language paper or alternative physics and chemistry paper, 30 marks in compulsory mathematics paper, 60 marks in history and geography papers, and the aggregate of 288 marks in all. If a candidate obtains less than 25 marks in the additional subject, such marks are not included in the aggregate. Any candidate who has obtained the pass marks in English but has failed in one subject only by not more than 5 per cent of the marks in the subject, and has obtained 400 marks in the total, is allowed to pass. There are several provisions under Regulation 9 for condoning similar deficiency by a special committee appointed to publish the results.

162. In the existing system of preparation for the Matriculation examination, which is also the secondary school-leaving stage, experience has shown considerable defects, which the proposals we have made in other parts of our Report and in this, will, we trust, help to remedy to a considerable extent. At the present time, those who prepare candidates for the Matriculation examination, prepare them predominantly for one type of education, namely that provided in the University. In training for these, they necessarily emphasise those

qualities, such as memory, or capacity to reproduce without critical examination a mass of undigested facts or second-hand opinions, in answer to set questions. These do not contribute to any originality or initiative, and much less to preparation for the practical exigencies of life. The University, again, as at present organised and functioning, is occupied predominantly with studies of an academic character even in branches relating to modern science. Its utility, therefore, in helping to solve the practical problems of the life of the Province, the development of its resources, and the advancement of its people, is necessarily limited, not only because of the limited type of material it receives, but also because of the limited range of its activities. We have accordingly proposed, in other parts of our Report and in this, considerable variation or diversification in the system of secondary education, calculated to meet the different requirements of the practical life of the Province in respect of skilled workmen of a higher degree, as well as for preparing that fraction which would inevitably go in for the still higher branches of their selected specialised studies and training in the University. We have likewise proposed to introduce, in the secondary stage, a growing contact with practical experience or vocational training, which necessarily must help to infuse a greater and a more living interest in the studies and education of the children than is the case in the more or less mnemonic incantations which pass today for "lessons" in the secondary stage. Finally, in order to minimise the pressure of examination at the end of the course, we have not only varied that examination or test which marks the finishing stage of secondary education, but also suggested adequate consideration being given to practical tests in addition to answers to questions, as well as to the record of personal work and character of each pupil as certified by those who have had contact with the pupil in the course of the secondary education. By all these methods, we believe, the overwhelming importance nowadays attached to Matriculation examination, as the only doorway through which aspiring individuals can march up to the highest ranges of education, and hope to obtain the material prizes of life in the various professions or vocations, will be lessened. At the same time, a more satisfactory basis will be provided from the point of view of those who receive such education as a testimony of their training and fitness, as well as of the requirements for the employment of the people who have satisfied such tests.

163. Let us, in passing, consider a problem of some importance in detail, though not of essential significance. The Patna University Commission was against prescribing any age-limit before which candidates should not be allowed to present themselves for the Matriculation examination; and the Regulations now in force do not require any such age-limit. The introduction of a minimum age-limit was originally brought about, probably because of the undue haste with which the precocious and able students were hurried by their parents through the process of education so as to make them, at the earliest possible opportunity, earn their bread in some lucrative profession or vocation, and so raise the status of the family. This led to a weakening of the physique, and undermining of the real knowledge obtained during this hurried process of education. What the parents desired was rather a quick finishing of the prescribed process, than a sound, careful, cultivation of the mind and the body through every stage of education. Consequently the practice of 'jumping' standards came into vogue, and other undesirable features affecting both pupils and teachers manifested themselves, which militated gravely against the basic policy of public education. Teachers, particularly those running private proprietary schools, have found in this method of making candidates jump classes a lucrative source of profit for themselves; and so many of them began to practise the device of offering to inculcate education in the shortest possible time, and obtain the largest remuneration for themselves from the pupils. This was undesirable from every point of view, public as well as private. To check this evil, the introduction of a prescribed age-limit, before which no candidate should be admitted to the Matriculation or other University examinations, had, no doubt, some justification in fact. If, however, the objectionable features noted above can be remedied, or avoided by other devices recommended in other parts of our Report, we think it unnecessary that a minimum age-limit should be insisted upon in regard to any candidate. Particularly would such an age-limit for appearing at a given examination be undesirable in the case of women candidates, as higher education among women has made very little progress. If higher education is to progress amongst women, it is of the utmost necessity that every possible facility and inducement should be provided, so that no needless impediment might deter them from prosecuting their studies in the higher stages.

164. We would not, however, like to make this distinction on grounds of sex only, restricting men students within given

age-limits, and only exempting women students from the same. We, accordingly, recommend that no age-limit need be considered, at least as regards the minimum before which no one can present himself or herself at a University examination, including the Matriculation.

165. The Regulations we have just summarised in regard to the Matriculation examination permit what are known as "private candidates" to be admitted to that examination, not only in regard to women candidates, but also in regard to others. The question of allowing private candidates to appear at any University examination, including the Matriculation, is complicated, not only by certain social customs and handicaps, such as seclusion of women, or early marriage, but also the frequent exigencies of parents' employment in the different parts of the country, which necessitate the family's moving from place to place, and thus interrupting the children's education, in accordance with the requirements of one's service or business. The class of people at present availing themselves of such education is largely affected by these considerations, particularly the last named. The problem is thus of acute importance. It must also be recognised that, under the present social system, where there are certain classes which still prefer, and can afford, to educate their children privately in their own homes by employing their own tutors, the possibility of private candidates, not educated in any recognised institution and yet sufficiently prepared to present themselves to a given examination, has a basis in fact, which cannot be denied, and should not be ignored. On the other hand, the insistence by almost every organised educational system upon regular training in the recognised institutions of the different grades, in order to qualify for any degree, diploma, or distinction granted by such a system, is grounded in the belief that these institutions are alone competent to provide the required type, degree, and method of education. These institutions, moreover, can be properly supervised and controlled in respect of their staff, equipment, methods and subjects of teaching, in accordance with a predetermined policy. This is not possible in the case of those educated privately. Education, besides, in one's own home, is apt to engender an exclusive atmosphere, and a degree of snobbishness, which is undesirable in a society founded on the democratic principle of perfect equality between the various members of the same community. Education, moreover, which is interrupted, and carried on from institution to institution because of the exigencies of the

parents' profession or service, is apt to be sketchy, and so unsatisfactory, as basis for the higher education in the university. A child who wanders from place to place because of the requirements of his parents' work cannot study at any single place sufficiently long to give an adequate idea of his character, aptitude, and attainments to his teachers; nor can his contact with practical work be properly maintained.

Universities, therefore, are increasingly anxious to see that the so-called "private candidate" is eliminated as far as possible. No doubt, there would be cases of hardship, if all "private candidates" were to be excluded from the benefit of university education. Particularly hard would be the case of the people who have satisfied the requisite conditions, but have failed at the first attempt at an examination. They would not ordinarily be able to pay another set of fees to make up the deficiency in any subject in which they might have failed. After all, secondary education is not altogether free of cost to the recipient even under the recommendations we have made. Hence, those who feel the burden of fees as an appreciable handicap in their studies must be excused from an avoidable increase of that burden in a poor country like ours. Permission must, therefore, be granted to those students, who have already fulfilled the requisite conditions of continued study in some recognised institutions, but have somehow not been able, by illness, accident or other considerations of the kind mentioned above, to present themselves at or to pass a given examination, to appear as "private candidates". That is to say, they need not be sent up by any particular institution, but are nevertheless allowed because they satisfy the requirement that they have prosecuted their studies up to the required degree, and in the required manner, and are certified to bear good character by some recognised authority.

## CHAPTER V.

### COLLEGES.

166. When a student has duly satisfied the test imposed by the University for admission to its portals, his work in the University will commence, usually at a college of the University. We have already considered in an earlier chapter of this Report, the general relationship between the University and the colleges, which we think ought to be established for the more efficient discharge of the duties entrusted to either of these bodies. Let us now consider, in this chapter, the existing relationship somewhat more in detail, review the work and equipment of the several colleges, and show where and why improvement is necessary in each case.

The colleges are the institutions where the actual work of teaching in the present Patna University is carried on; and where it would still be carried on even under the scheme of reorganisation we have proposed in this Report. The change would be rather in the relationship between the University and the colleges, than in the actual work to be done in the University. From being, as they are at present, merely "admitted" to the University, remaining, however, as independent institutions each by itself, most of them would be constituent members and integral parts of the University organisation. To understand the full significance of this change, let us review the present position in regard to the several colleges.

167. For a college to be properly constituted and entitled to carry on any educational work in the university stage, it must first be admitted as an institution recognised by the University for a given purpose. The colleges thus admitted by the present Patna University are enumerated in chapter III, and they are recognised to the extent shown against each institution. The central provision of section 9 in the University Act relating to the admission of colleges is very concise. There are provisions also for laying down conditions which must be fulfilled before an institution can be admitted as a college in the University. Every college seeking admission to the University must apply, in the first place, to the Syndicate. The Syndicate must record its opinion on the report of a special committee of local inquiry, on the application of the intending college, as to the fitness or otherwise of such application to be granted. This opinion must be forwarded

to the Senate, which must approve or reject the application. All these proceedings are then forwarded to the Provincial Government, which is really the final authority for granting the application.

168. The Regulations lay down more fully the conditions for admission of an educational institution as a college. Every application for such admission must be made, in the first place, by an officer appointed by Government for the purpose, if such an institution is managed by Government; or by the governing body of the institution in the case of any other institution. The application must be countersigned by two members of the Senate, and addressed to the Syndicate through the Registrar. This means that no application could even receive consideration, if it is not sponsored by at least two members of the Senate. Presumably, an institution managed by Government will never lack this formality; but the same cannot be said of a college under private management.

169. Every such application must also state the courses of study which the intending college proposes to provide for; and the standard to which it wants to teach in each such course. The Syndicate must also be satisfied that the institution is to be under the management of a regularly constituted governing body, on which the teaching staff is properly represented; that the character and qualifications of the teaching staff, and the conditions governing their appointment and tenure of office, are calculated to make suitable provision for the courses of study to be carried on by the applying institution; that the buildings of the institution are suitable, and that provision will be made, in conformity with the Regulations, for the residence in such buildings, or in lodgings approved by the authorities of the institution, of such students as are not residing with their parents and guardians. Provision must also be made for their supervision and physical welfare; as also for a library. In the case of a law college, the library must be such that the students have full access to the reports of leading cases, or books containing them.

If the application relates to studies in some branch of experimental science, the Syndicate must further be satisfied that arrangements are, or will be, made, as the Regulations require, for a properly equipped laboratory or museum, and that gas, water-supply, apparatus, chemicals and appropriate fittings for the laboratory and lecture rooms are provided.

In all colleges seeking admission to the University, due provision must be made, so far as circumstances permit, for

the residence of the Principal and some members of the teaching staff in or near the buildings of the institution, or the hostel for students. The financial resources, moreover, of the applying institutions must be such as to make due provision for its continued maintenance; and the fees levied on the students must not be such as to involve undue competition with any other college in the same neighbourhood, so as to be injurious to education.

Every college must also provide for tutorial classes as well as lectures; so that the buildings of the college must be such as to provide adequate number of class rooms; and the floor and cubic space in each such class room should be adequate for its specific purpose.

The application must likewise contain assurances that, after the college has been admitted as applied for, all changes in the teaching staff, and transfer in the management of the college, shall be immediately reported to the Syndicate, which is, at any time, entitled to make or order an inspection of the college as it thinks fit.

On receiving an application for admission, the Syndicate must order a local enquiry to be made in regard to all matters stated above. When such an enquiry is completed, the Syndicate must report to the Senate their opinion as to whether the application should be granted, with or without modification, or refused. The report must also contain the results of such enquiry as may have been ordered by the Syndicate.

170. The Senate, in its turn, on receiving the report of the Syndicate, considers the application, and decides whether or not it approves of the application. At this stage the Senate is entitled to order a fresh enquiry if it considers one necessary. After due consideration and review of all relevant matters, the Senate must resolve to approve the application, with or without modification, or reject it; and when such resolutions have been passed, they are to be forwarded, together with the proceedings of the Syndicate and Senate relating to it, to the Provincial Government.

171. At the apex of the pyramid comes the Provincial Government, which, after a fresh enquiry if necessary in regard to any issue which may not have been rightly considered by the Syndicate and the Senate, and after full consideration of the proceedings of the Senate and the Syndicate, may grant the application, in part or full, as they think proper. When an application is so granted, Government issue an order,

specifying the courses of instruction in which the institution is admitted, and the standard up to which admission is granted in each such course. If any application or part thereof is refused, the reasons must also be stated in writing.

172. If and when an admitted college desires to add to the courses of instruction for which it is already admitted, a similar application as that outlined above must be made. But in this case the countersignature of two members of the Senate is not necessary. This application must also contain all particulars necessary to satisfy the Senate in regard to most of the matters mentioned above, as regards the additional courses. Thereafter such an application for admission to additional courses goes through the same procedure as the one just sketched above for an application for admission in the first instance.

173. An application for admission may be withdrawn at any time before an order has been passed on the application; while a college, already admitted, may, for sufficient reasons, be excluded from the privileges of the admission. Before deciding upon such an exclusion, a copy of the motion to exclude a given college, together with the written statement of the reasons for such a proposal, must be sent to the Principal of the college concerned, with an invitation to him to submit any representation that he may like to make against such motion being accepted. A time limit must be laid down within which such representation can be made, though the Syndicate is authorised to extend the limit. If no representation is received, or the time fixed for receiving it has expired without any representation being received, the Syndicate must consider the proposal for exclusion. If it so desires, it may make any enquiry in the affairs of the college concerned that it considers necessary. After considering the proposal for exclusion, the representation, if any, from the Principal concerned, and the results of any enquiry that the Syndicate may have ordered, the Syndicate must report to the Senate their opinion on the subject, and forward all proceedings in connection with it to the Senate. The Senate, in its turn, considers the proposal and the report and proceedings of the Syndicate thereon; makes, if it deems necessary, further enquiry; and takes such decision on the matter as it deems appropriate. All these proceedings are then forwarded to Government, which is the final deciding authority, as it is in regard to admission. By this procedure, a college, once

admitted, can be deprived of the privileges of admission, in whole or in part, as may have been ordered by Government in the case concerned.

In the proposals for reorganisation of the University, we have put forward in this Report, much of this procedure for recognising, affiliating or admitting colleges to the University will become unnecessary. Those colleges, Government or private, which fall in with the suggestions we have made, and become integral, constituent, parts of the University, will not need any further recognition or affiliation. Some special procedure will, no doubt, have to be devised for their becoming constituent colleges of the University, in the first instance; but that procedure may be laid down in the new Act prescribing the constitution of University; and so no further ceremonial be needed to establish the new relationship. The new relationship would, of course, be the outcome of acceptance of our proposals by Government, as well as by the private bodies now conducting colleges admitted to the University. The Schedule to the Act, enumerating the colleges which have agreed to become constituent parts of the University, would only confirm, as it were, the agreement previously arrived at in this behalf. As regards those other colleges, now existing, or to be brought into existence hereafter, which do not accept this new relationship, the procedure for their recognition or affiliation would have to be maintained. But it need not be quite so elaborate and protracted, nor involve such a multiplicity of authorities intervening, as is the case under the present Act. The rôle of the Provincial Government will, it need hardly be added, be taken over by the University, with whom will rest the last word in such matters. And the University may act, in these matters, through anybody within its own organisation, which it deems suitable for the purpose. The Senate will, of course, lay down the general policy which should govern such admission of new colleges. It may even reserve to itself the final voice in decreeing affiliation of any applying institution. But the detailed enquiries and consideration preceding such recognition or affiliation may be entrusted to be carried out to the Syndicate, or to the Syndicate in consultation with the Academic Council, as the Senate may deem proper. The same procedure may be followed in regard to the exclusion of any college, once admitted or affiliated, from the privileges of such affiliation; though such an occasion is no more likely to arise under our recommendations than has been the case under the existing constitution.

174. One other branch of the present University organisation may also be sketched here, as it is concerned with teaching. This is the University Teaching Extension Delegacy. This Delegacy is constituted by the Senate, and consists of a President, appointed by the Senate at the annual meeting, two Fellows representing the Senate in general, and two from the Faculties elected by the Senate, and such additional members as the Delegacy may co-opt from among the additional members of the Faculties, provided that not more than two such members must be co-opted from any one Faculty. These Delegates, except the President, hold office for three years, and four members form a quorum. The Delegacy elects its own executive committee. It has power to organise lectures and classes, to hold examinations for candidates who have qualified themselves by a prescribed attendance at such lectures and classes, to make rules for such lectures and classes, and to confer diploma on successful candidates.

The Delegacy must not incur any expenditure beyond that provided in the University budget; and the previous approval of the Syndicate must be obtained to any appointment made by the Delegacy, or to any rules made by it, or any scheme of lectures and classes prepared by it. Only University Professors, Assistant Professors, Readers or teachers in a college must be employed as lecturer or teacher by the Delegacy.

Under our recommendations, the functions of this body will be considerably modified, even if it is retained at all. As the entire University organisation is designed to be interested directly in teaching in all stages of University education, such a special body as the present Teaching Delegacy would really become out of place. And even if it is maintained to look after some special branch of teaching in or under the University, e.g. extension lectures, its place and function would be definitely secondary to the main machinery for ordinary teaching in the University.

175. Let us now review briefly the actual working and equipment of these colleges to see wherein they would need strengthening and improvement. This review is all the more necessary if the radical proposals we have made for the expansion and extension of the University in an earlier chapter are impossible to be realised for any reason not foreseen by us.

The premier collegiate institution in Bihar is, of course, the Patna College, admitted up to the highest degree courses

by the Patna University. It is an institution older than the University itself; and has had a life by now of over 77 years. At the present time it is devoted mainly to Arts subjects, and has a staff of 12 Professors, 21 Assistant Professors, 9 Lecturers and other junior members. The total number of students at present studying in this institution is 891 in the various departments of undergraduate work, and 197 in the postgraduate section. The college is a Government institution, and the members of its staff are Government servants. In its actual working, the Regulations of the University require attention to be paid to tutorial work, which is, therefore, reckoned in the number of hours per week a college teacher works.

176. This institution needs no immediate strengthening. With a closer and more detailed study of the principal language in this part of India, as also of the philosophies and other branches of Indian or oriental culture, which the improving resources or specific endowments may facilitate, the staff may, however, have to be strengthened. From every member of the staff, we would suggest, some concrete evidence must also be required of new contribution made by him or her from time to time in his own or her special subject. This is necessary to avoid the fatal ease with which college teachers, like any other people in a similar position, are apt to overlook the need for keeping abreast of the latest developments in their subject, and making their own contribution, once their posts are made permanent, and they themselves confirmed. Security of tenure is, the Committee fully recognise, essential for any sound work to be done. No one who is in constant dread of losing his job could be expected to do real, original work involving labour of a high order, and requiring mental peace as a *sine qua non*. But, while recognising the value of security of tenure, the Committee are also aware of its tendency to make the person thus secure in his post to be indifferent to any further exertion in his own chosen walk of life. We would leave it to the appropriate authority in the reorganised University as we have recommended, to deal with questions like the problem of research in the University both by the pupils and the professors; the centralisation of such research at a single place like Patna, or its diffusion through several centres; the qualifications of those carrying on research, and the facilities to be provided for them—when those bodies come into being. But we would suggest that college teachers in all grades and departments be required from time to time—say every third year—to show evidence of concrete work, other than

lecturing, done by them in their subject, on pain of their promotion being suspended in any period in which they could not show such contribution; and their service terminated if the absence of such contribution is continued for any length of time, say six years. In the duties of these college teachers must also be included the obligation to give advice, if requested, to Government, or any public authority, on matters covered by their usual work in the University. Finally, it would be a good thing for the teachers as well as their students, if they were required to tender advice, in matters connected with their subject, to private individuals or corporations—to carry on “private practice”—for which they may be remunerated by the parties asking for such advice.

177. If and when a Department of Fine Arts is added—music, painting, sculpture—to the present scope of studies in the University of Patna, it need not be attached to the Patna College; but may be conducted as a University department directly managed by the University itself. The Faculty of Arts seems very limited—if not a misnomer altogether—so long as the cultivation of Fine Arts is conspicuous by its absence in the reorganised University for Bihar.

178. The Science College, Patna, next in importance to the Patna College, deals only with the material sciences of chemistry and physics, including mathematics. It provides a four years’ degree course for students in these three departments, and has a staff of 35 teachers. The receipt from fees aggregated Rs. 44,319 in 1938-39 and the total expenditure in the same year was Rs. 3,22,747.

179. This college has excellent accommodation, with well-equipped laboratories for those subjects for which it prepares students. But the college can scarcely be called complete, even as a college of science, so long as it excludes biology—including botany and zoology—from its purview; or omits to take account of geology. Unless these departments are added, and the necessary facilities in equipment and staff provided, the college will fail to discharge even its primary duty of providing degree courses in all branches of material sciences. The Committee consider this as among the most urgent of the reforms needed in the existing University organisation; and it must be effected even while the other suggestions or recommendations in the Committee’s Report are under consideration.

180. We would also like to add that the efficiency and utility of this institution would be very considerably increased, if such departments as one for experimental psychology, or

another for astronomy and meteorology were added. A considerable amount of research in science subjects is being carried on, it must be remembered, by the several Government departments. This, however, has, as things stand, no correlation with science as it is taught in the University. We consider it of urgent importance that all this research be co-ordinated for the general benefit of the Province, and correlated with the work done in the Science College.

181. During our discussions with the staff of this college, a matter of general importance was emphasised which we would like to mention in this connection. It was suggested that the authorities concerned might arrange to establish very high grade technological institutes in the different parts of the Province to provide the highest education and training in the applied science and technique of agriculture, industry, mineralogy, etc. While welcoming the suggestion, the experienced members of the Science College staff emphasised their view that the Province would always need a fully equipped institute in pure science. Elsewhere, as in Germany for example, large industrial entrepreneurs had their own sections of pure science and of technique. In India, the individual agriculturist or industrialist is averse, even if he could afford it, to have his own provision for pure and applied science relating to his concern; and so it is all the more obligatory on a central provincial organisation like the University to have at least one fully equipped institute for pure science in the Province. If the expansion of University activities is to come in regard to education in science, it must come, not in any degree as substitution of the present provision, but by way of supplementing the same. We endorse this view in its entirety.

182. The extension and expansion of the University activities in this branch of studies may thus come by way of :—

- (i) adding new departments to those now existing, and the lack of which makes the existing education in science incomplete;
- (ii) making the necessary increase in the staff for these new departments;
- (iii) providing research scholarships in each department of the college;
- (iv) encouraging the staff and requiring them to work in addition to their lecturing duties so as to keep abreast of times. Other remarks made in regard to the Patna College on this matter would also apply here.

183. In the Bihar College of Engineering, which we visited, we found a similar difficulty, which comes in the way of the fullest possible expansion and extension of the existing institution. This college is only for training in civil engineering, the corresponding branches of electrical engineering and mechanical engineering being conspicuous by their absence. If the institution is to be properly developed, we have no doubt, that these branches will have to be added forthwith, and the workshop to it will have to be improved in proportion.

184. The Prince of Wales Medical College has about 300 students, and a staff of about 30, mostly Government servants, some of whom are allowed private practice. Attached to the college is a hospital, with 539 beds for clinical work, under a Superintendent different from the Dean or Principal of the college.

The college charges a fee of Rs. 150 per annum, inclusive of all heads under which the work is done. It provides a six years' course after the Intermediate Science examination after passing which the students are mainly taken. For those students who have already got a qualification in biology, one year is excused.

Women students have 3 seats reserved for them, and they are paid each a stipend of Rs. 30 per month. Another batch of 8 seats is reserved for Mussalmans, and yet another 5 for Bengalis domiciled in Bihar. Out of a total admissible strength of 40, 16 are thus reserved seats.

After graduation, a student may put in another year of training as House Physician or House Surgeon for his better preparation as practitioner. But there is no other opportunity or facility provided for research.

The college costs about Rs. 2,52,555 in all, to which must be added Rs. 4,23,381 on account of the hospital, and from which must be deducted about Rs. 44,400 received by way of fees. A small number of paying patients are also admitted, but the income on this account is negligible. As there are no facilities for a course in biology at the Science College, Patna, that subject, essential for a proper medical education, has to be done in this institution. It accordingly takes 6 years from the Intermediate Science examination to qualify for the degree, or, starting from the Matriculation examination, 8 years in all. Taking into account, further, the year devoted to hospital training, the earliest a medical practitioner can commence work is 9 years from Matriculation, or at about 25 years of age.

The college has considerable possibilities of expansion. We understand a complete course has already been drawn up for hygiene, or a Diploma in Public Health, which, we trust will soon be adopted, and Regulations made accordingly. Similarly a Diploma in Dentistry, or in Radiology is a great desideratum, which should be added at an early date.

Though the bulk of the work of the college is for training in degree courses, we consider it would add to the utility of this institution, if it also provided training and instruction for the Diplomas of the College of Physicians and Surgeons and also for that of the Indian Nursing Association, or in Midwifery.

The administration of the College will gain considerably in efficiency by substituting for the present divided authority of the College Principal and the Hospital Superintendent a single head for the whole institution. Of course, the Superintendent for the Hospital would also continue; but, under the arrangement we have suggested, he would be, for administrative purposes, under the Principal.

Formerly, there used to be I.M.S. officers on the staff of the college, which involved considerable prejudice to the college work, owing to frequent transfers of such officers according to the exigencies of Government service. This practice, therefore, ought to be discouraged, except in cases when a really competent I.M.S. officer, suitable for college work, is taken on loan for a definite period by the University.

The Department of Pharmacology needs to be strengthened by the addition of a chemical analyst. The Biology section, on the other hand, may well be removed to the Science College, Patna.

The college does not concern itself primarily and directly with indigenous drugs, but uses all those whose values have been established. We consider it desirable if a more direct effort is made in this behalf.

Similarly, there is no contact with the indigenous systems of medicine, or Homœopathy; at least for the former we would suggest that a more energetic effort be made for their encouragement, either in this or any other suitable institution.

185. The Committee has not been able to visit any of the *mofussil* colleges, and discuss with the members of the staff in each, the requirements of each such institution. But the general remarks made earlier in this chapter will, as the Committee gather from the written replies already received, apply to their case as well.

## CHAPTER VI.

### ORGANISATION OF TECHNICAL TRAINING UNDER THE UNIVERSITY.

186. As organised today, the University acts in a limited groove according to traditional lines. These do not concern themselves sufficiently and directly with the requirements of the Province in the industrial, agricultural or commercial segments of its collective life. It is true that the Province itself is not sufficiently developed in these regards, so as to demand the active service of the University, and be able to utilise those services when made available. Such material development of the Province as has taken place by the establishment of modern industry in it, opening up all its backward areas, developing its mining and metallurgical industries, and increasing consequently its commerce, has been done more often by outside enterprise than by the enterprise of the children of the Province themselves. In this there is a certain degree of a vicious circle. Inasmuch as the University has not played its part as much as might be desired in the development of the Province, in regard to agriculture, industries or commerce, the Province is backward; and because the Province is backward and undeveloped, the University has not sufficiently taken a living interest in the fullest development of the material resources in the Province.

187. In the reconstructed University, and with the prospect of provincial development as we have envisaged it in other parts of our Report, we consider it of the utmost importance that the University should take the most direct interest and active share in the development of the agricultural, industrial and commercial resources of the Province. Not only should it establish specialised departments of its own for the highest technical research in the several branches of science and knowledge included in the above categories; it must also help to provide skilled labour of the highest degree for the initiation, working, control and management of such branches of the country's life.

188. Training in technical research may be welcomed and would be facilitated, particularly if the various interests concerned are themselves somehow made responsible for the establishment of the necessary chairs, departments, libraries, laboratories and the like, which will specifically be told off to attend to their particular task, and at the same time help in an all-round development of the Province with special

reference to their own particular branch of activity. In this connection we may note the observation in the replies to our questionnaire supplied by the Tata Iron and Steel Company, Limited, in answer to Question no. 44 :—

“ A single technical institute for the Province of Bihar to meet the needs of agriculture, industry and commerce is a big undertaking, and, we are afraid, may become unwieldy. Further, it may be desirable to establish a course of studies in areas where there is most need, and where the conditions are most favourable for the work and the development of the institute. Instead of establishing, therefore, a single technical institute, we are in favour of splitting it up, and establishing three institutes, one for agriculture, one for industry, and one for commerce, in those places where facilities are already available for such training.”

189. The University must, likewise, organise extension lectures, or carry on other activities with special reference to new or particular problems of the moment which affect any of the interests we have mentioned above. It is only by these ways that the University would be made to play its part in the all-round development of the Province, and hold the attention of the public in their successful operations. The constitution of the University must, accordingly, be so drafted as to permit its expansion in all these regards, and allow it to devise ways and means for financing the same, if the authorities setting up or reconstituting the University do not provide direct grants from the start which would be adequate for all these purposes.

190. The question of securing for Bihar, affiliated to the University of the Province, a well-equipped technological institute, able to provide instruction, guidance, and practical training in the various problems of applied science and technique needed for the material development of this Province and its enormous resources, must occupy the fullest attention of those concerned with the reorganisation of education in the Province. The main difficulties in the task of organising and providing such a technological institution, would lie in the direction of finance, skilled workers, and the necessary experience in the supervision, control, and management of such an institution.

191. Regarding finance, it is obvious that a really up-to-date and well equipped technological institution, would, at the lowest computation, cost too much for the ordinary provincial purse to institute and maintain. The University resources, also, cannot, under any conceivable scheme, be so expanded as to provide the equipment and running of such an institution. The Province needs to develop its vast mineral resources, its enormous field of possibilities for agriculture and forest exploitation, and its great industrial possibilities of a most varied kind; and for all these, ample funds would be required. Regarding the *modus operandi* for setting up such an institution, we could have, either, a single, centralised but many-sided institution, devoted to the highest technique and research in agriculture, mining, industry, and forest, all in one; or a separate, specialised college for each of these departments of technology in the different divisions of the Province. But the cost would be in any case prohibitive for the provincial purse.

192. On the other hand, the need for a thorough cultivation of these our basic material resources, and their systematic development, is equally impossible to deny. The contribution of modern technique and applied science in the proper development of all these resources is likewise impossible to question. The longer the Province neglects to develop these resources, or dispenses with the aid of science in such development, the poorer it will continue to remain. Some way must, therefore, be found for developing these resources by means of appropriate technique, so that the latent possibilities of the Province's material wealth may be realised within the life time of this generation.

193. The only means by which the necessary additional resources can be made available for this purpose is to appeal to the interests of those bodies, or individuals, who are likely to gain substantially by the development of these resources. The great agricultural interests, for example, as represented by the numerous wealthy landlords, may well be persuaded to combine for providing an agricultural college, furnished with the best equipment and staffed with the most experienced teachers, to develop ways and means for cultivating the enormous agricultural wealth of the Province. This wealth has, for one or another reason, capable of being remedied by man's ingenuity, remained undeveloped. A good agricultural college, adequate for the needs of the Province, properly equipped and staffed, may cost Rs. 10 lakhs to establish and

perhaps, a couple of lakhs to maintain every year. This may not be within the means, at the present time, of the University purse; or even of the provincial finance, especially if the other demands of a like nature on the same purse are to be considered. But improved agriculture must necessarily benefit the agricultural class, which is responsible for three-fourths of the material wealth of the Province, and provides the main source of livelihood for a still greater proportion of the people.

194. There is, indeed, an Agricultural Institute, organised and maintained by the Central Government in Delhi now, which was once at Pusa within this Province. But while that institute at Delhi may be needed and utilised by all the provinces of the country equally, this Province must itself have its own agricultural college or colleges. The buildings and grounds of the Pusa Institute are still available; and may, with a relatively small additional outlay, be improved to serve as the nucleus for this purpose. The existing Agricultural Institute at Sabour may likewise be expanded and improved, in the same way, and perhaps to the same extent, to serve the same end. In view of the importance of agriculture as the main source of the wealth of the Province, we consider it desirable, that the several divisions of the Province be provided with one agricultural college, each, by endowments obtained from the landed interest in each division of the Province. But even if this is not immediately feasible, we would suggest that at least one fully equipped agricultural college of the highest grade be established in the Province, while agricultural institutes of a less ambitious order may be set up and maintained in each division. The inducements which the University can offer to this class, or its leading representatives, for making such an endowment, are, no doubt, limited. The conferment of an Honorary Degree or a seat in the Senate, and, therefore, in the governing body of the University, may have its appeal to a limited and enlightened section of the class.

195. It is, however, inadvisable to depend wholly upon such a slight intangible appeal to such a limited section, for the initial outlay, as well as for recurring expenditure, in connection with an institution of the kind we are contemplating. The Provincial Government has it in its power to provide more substantial inducements for the interests concerned to come forward, endow such an institution, and provide its running costs, which may materially relieve the responsibility of the Provincial Government in that behalf, and afford the necessary means for the development of the Province. in regard

to its important source of material wealth. We need not particularise these inducements much further; but we consider them sufficient and adequate for the purpose in view.

196. We are aware, indeed, that in the development of agriculture, and the increased material wealth derived from that source, there may be socio-economic considerations, and many more of a legal and customary kind, which, even when the technique of cultivation is infinitely improved, would stand in the way of the fullest possible development of the available resources. Until these obstacles or difficulties have been removed, improved technique provided by the kind of institution we have been speaking of may very possibly result in a burden rather than in a benefit. Inasmuch as the student trained for scientific agriculture or industrial research would have no opportunity for using his improved talents, while those social or legal obstacles remain in his way, the knowledge received in such an institution or the familiarity gained therein, would have been thrown away.

197. Here, too, the room for action by the Government of the Province responsible to the people is much greater than that relating to the University, which can act, if at all, in a very very restricted field. By legislative action or administrative influence, Government should try and remove these legal, customary, or social obstacles which stand in the way of the fullest opportunity being available to those practically trained in these departments to utilise their knowledge and experience. We would, accordingly, recommend, with all the earnestness at our command, that Government do explore the possibility of inducing the agricultural interests, as represented by the zamindar and richer tenant classes, to consider the necessity of providing institutions of the type we have mentioned, assuring the classes educated in such institutions, at the same time, of reasonable opportunities for the use of their knowledge and training obtained from these institutes, and a fair return for their work in order to enable them to live.

198. We are aware, indeed, that in the present state of public sentiment in the Province, the relations between the various sections of the landed classes, particularly the *kisans* and the zamindars, are by no means such as to encourage the belief that the entire class will join in organising, equipping and maintaining the institution of the level we desire, for the cultivation and development of the agricultural wealth of this Province. The zamindar class has particularly been led to believe that they have grounds for grievance in the recent

developments. A sense of this grievance does not predispose them to come forward to the aid of the Province in such a manner as is contemplated here. The record of this class hitherto in this Province, in the matter of public benefactions, and specially in regard to university development, is not so encouraging as to justify an easy approach with the expectation of a ready response to an appeal of the kind we are contemplating here. It may be added, however, that, in times gone by, when this Province with its University formed part of Bengal, this class has made handsome contributions to the University of Calcutta. The example of numerous benefactions to the University from distinguished and wealthy citizens or *alumni* in the Province of Bengal has not repeated itself in this Province, ever since the University of Patna has been set up as a separate institution. The wealthier tenants are neither educated nor perspicacious enough to appreciate the value of such institutions as contribution to their own interests; and so it is hopeless to expect from them contributions towards the cost of setting up and maintaining such an institution by a sort of self-imposed taxation. Much less can such an action be expected from the rest of the agrarian community.

199. Nevertheless, we think it not impossible to persuade, at least the more reasonable section of the zamindar class, to come forward and assist in the task of the development of their own particular interest, even though, for the moment, there may be difference of opinion on the relations between the agricultural worker and the land-owners, and even though there may be doubts as to the possibility of appropriating the real material gain from such a development exclusively for the benefit of the landlord class. We would, accordingly, suggest that every effort be made by those in authority to try conciliatory devices, and explain the identity of interests in the long run between the land-owning and land-working classes, which, between them, constitute nine-tenths or more of the Province's population. If this can be accomplished, the proposal we have made above, may receive a fair consideration, and perhaps an early realisation.

200. Once established by donations or endowments permanently made over to the University, or to the Provincial Government in trust for the University, whether in kind or in cash, the working of such a provincial agricultural college need not be a very difficult matter. A suitably equipped agricultural college, or technological institute in that department, should have ample landed resources for the cultivation

of a variety of crops, and the trying out of experiments. It must also help in the development of a number of industries founded upon these crops, whether principal or subsidiary, which are at present conspicuous by their absence or rarity in this Province. The income of the produce from such lands, or the profit of such industries as are founded on the crops produced in these lands owned by the institute, or by the University for the purpose of the institute, may not be so considerable as to meet all expenditure in connection with the running of such an institute. The deficit may partly be made up from the fees charged to the students who attend these classes, though, presumably, they will be too poor to bear the expenses of their own education. Unless the landed interest sees fit to educate its own youth in the walk of life which provides their own livelihood, the operating expenses will still leave a deficit. The running costs will, of course, vary with the scale of operations and activities conducted by these colleges. These, we trust, would be such as are required for the needs of the Province, and commensurate with the capacity of the people. We may, however, judging from the analogy of the corresponding institution in Bombay, assume the running costs of a full-fledged agricultural institute to be in Bihar not much more than 2 lakhs a year. We need not, indeed, have in Bihar the same high scale of salaries and allowances, which are to be found in regard to the staff of the Agricultural College in Bombay. But this Province may have a much larger scope of activities than in Bombay; and, therefore, even though the relative scale of salaries and allowances may be lower, the cost may be in the aggregate very nearly the same in view of the larger staff provided.

We have put forward this proposal, not only because we are convinced of the need of such an addition to the normal activities of the University, but also because we consider it impossible for the University in any other manner to provide for it. We deem it not at all improbable that, rightly approached, the interests mainly likely to be benefited by such a development would come forward to assist in its foundation and in its running; and so meet one of the greatest needs of the Province, and aid in its fullest development.

201. The same may be said with regard to an appropriate institute of mining, industrial technology, and forest development. We need not repeat the arguments we have mentioned above in favour of, or as opposed to, the possibility of providing a well-equipped institute for each of these branches of applied science and technique. They are essentially the

same everywhere. The problem is, of course, not identical in these matters with that in regard to the agricultural institute. There is already existing in the Province a well-equipped school for mining and mineralogy at Dhanbad, which is maintained at present by the Government of India, but with regard to which the Provincial Government might make arrangements with the Government of India, to assist in this task. This school may well be made the nucleus of a full, all-round development in that field, and improved so as to provide the best training and instruction in this particular field.

202. The mineral resources of this Province have, as already remarked, never been sufficiently developed, or even explored. The need and scope, in Bihar, for profitable development of these resources, by means of a well-equipped institute of mining and mineralogical technology of university level, cannot be denied. At the present time, these resources are being rapidly depleted by unscientific working and outside agency, e.g., metallurgical coal is being used on an extensive scale for raising steam; and so the superior quality is being exhausted. The exploitation of the mineral wealth of the Province must be reserved to the children of the Province; and if the local enterprise is not found sufficient for the purpose, Indian enterprise from other provinces may be attracted. We consider, however, that the lack of enterprise in this Province, in regard to mineralogical development, is due more to the lack of sufficient knowledge and information on the subject, than to the absence of adequate appreciation of the possibilities of development in this field, in addition to the inherent ignorance or apathy amongst the wealthier classes of this Province towards this source of producing new wealth.

203. We would, accordingly, suggest that a well sustained campaign of publicity and general information, regarding the possibilities of mineral development of the Province, may be organised by the University, with all the assistance that Government can render, so as to attract the likely elements in the population of the Province to come forward and assist in the foundation, equipment and working of an up-to-date efficient institute of mining and mineralogical technology. Starting with the Dhanbad School of Mines as the nucleus and the focus of the new enterprise, we consider it would redound to economy as well as efficiency, if all the developments in the science and technique of mining and mineralogy are developed in the same institution by improvements in equipment, staff, and operations, so as to bring it up to the desired level.

204. The agricultural wealth may not take so long to respond to the influence of new technique as that in regard to mines. But the socio-economic obstacles in the way of a full development of the agricultural wealth do not stand quite so formidably in the way of a corresponding development in the yet unknown mineral wealth of the Province. There is, besides, not the same prejudice, nor anything like the same incipient antagonism between the classes of the community concerned with mine-owning and mine-working in the Province, as may be in regard to the corresponding classes in agriculture. Prejudices to be overcome are not so difficult, and the conflict of interests not so deep. We think it, therefore, not unlikely that the reception in regard to the development of the mineral wealth by means of a well-equipped mineralogical institute would be much more easy, and the scope for realising a substantial net profit equally varied and considerable; and so the chances of developing university activity in this field without much financial strain are far more considerable. If necessary, however, the interests mainly concerned with the development of this form of natural wealth in the Province may be approached in the same way as the agricultural interests, to found, equip, and maintain such a high grade mineralogical institute under the University as we have suggested. And the Government of the Province may be expected to apply the same inducements to persuade the interests concerned to come forward and help in this direction as we have indicated in regard to the founding of an agricultural institute.

205. The establishment of a well-equipped institute of industrial technology stands on a slightly different footing. Large scale industry was, until recently, relatively absent in this Province, if we leave out the great enterprise connected with the Tata Iron and Steel industry in Jamshedpur\*. The recent advent in Bihar of modern industry in connection with sugar, cement, paper, and the utilisation of all their ancillaries or subsidiaries, no doubt requires considerable help in the shape of improved technique and all-round rationalisation in the equipment as well as methods of production, and the disposal of the produce. The possibilities of the immense raw materials derived from the mines of the Province, and even perhaps from the new developments in regard to agriculture, may hold

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\* See appendix I to this chapter, a memorandum of a visit to Jamshedpur for an Institute of Technology.

See appendix II to this chapter, replies to questions 46, 47, 48 and 49 of the Tata Iron and Steel Company, Limited.

out an immense promise of industrial development, which, in the absence of a suitable, equipped technological institute for industrial development may be wasted.

206. The industrial magnates in the Province are neither so numerous, nor perhaps so wealthy by themselves, as to justify any very great hope of their being able to provide, from their own resources, the necessary initial endowment and the working expenses of a well-devised and well-equipped institute of industrial technology. The great Iron and Steel enterprise, however, at Jamshedpur has, by itself, made sufficient wealth out of the mineral resources of this Province, for the latter to feel justified in demanding a substantial contribution from this concern in the task of providing a well-equipped technology institute for the Province. We, therefore, recommend to Government to invite the authorities of the Tata Iron and Steel Co., Ltd., at Jamshedpur, to collaborate in the solution of this question, by contribution in cash as well as in kind, for the creation of a suitable, well-equipped technological institute for the benefit of the entire Province, if not of the whole country.\* We think it not unlikely that, properly approached, those authorities would make a handsome response, which has been traditional with that firm almost ever since its commencement. The greatest need of the Province would thus be solved, and the best guarantee of its future prosperity assured, without much outlay from the provincial purse.†

207. In this connection, we would like to add the observation that, for any interests of the kind we have enumerated above to make contribution in the direction mentioned, it is of the utmost importance that a concrete scheme be prepared, and details worked out, by the University, both in respect of the nature and scope of activities of the several institutes contemplated in the foregoing recommendations, and also as regards their equipment, staffing, and the cost, both initial and recurring. The same authority must also make an estimate of the possible benefits that may be expected through the establishment of such institutions in the material development of the Province in the various fields. The absence of a concrete scheme and reliable estimate of the benefits to be expected is one of the strongest reasons for the provincial public remaining unmindful of the needs of the country and the ways and means of meeting it. The University is the only body which can command the necessary information and insight for preparing

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\* Cf. Appendix I to this chapter.

† See Appendix II to this chapter.

concrete schemes and detailed estimates of this kind. Even Government would be helpless to make a suitable appeal to the various sections of the community concerned, if they have no basis to invite the latter to offer their opinions about, or to make their suggestions for, modifications, alterations, or improvements of the original suggestions, and the contribution needed. The provision of practical training in the appropriate workshops and factories should also be made obligatory by law if necessary. As the reply to our questionnaire from the General Manager of the Tata Iron and Steel Co., Ltd., says: "Arrangements for practical training of such students should be made by the University or the college authorities and it should be obligatory on the part of all concerned to give adequate facilities for such training as far as practicable."

208. The only other difficulty in the way of giving effect to our suggestions lies in the lack of the necessary staff and experience for the working of these institutions. At the present time, this deficiency seems to be considerable; but it is, in our opinion, by no means insurmountable. The teaching personnel, suitably qualified, even if not locally available, can be recruited from other parts of India; for a limited term, say for five years, within which the local talent, such as it is, may be trained up for the purpose, and by means of which the initial difficulty may be overcome. It is impossible to believe that, in the whole of India, there would not be found men of knowledge, training, and experience, which would suffice for the requirements of staffing the institutions we have mentioned above. But, even if that contingency should unfortunately happen, we would not stop at recruiting the necessary staff from outside India, for the time being, so as to overcome this initial difficulty. We must repeat, however, that the possibility of obtaining the necessary Indian talent must be explored in every nook and corner before such a step as engaging non-Indian personnel for running these institutions be taken; so that no reproach need be made on the ground that India lacks its own personnel to develop its own resources.

209. We, therefore, recommend that Government invite the existing University authorities to prepare, at an early date, definite plans for the establishment of all the various technological institutions in the several parts of the Province, or even at one central place, in the various branches of applied science mentioned. These plans should include reasoned estimates of the equipment, staff, buildings, etc., needed, the initial as well as recurring costs, and the possible benefits

expected from their working. Then only would it be possible for Government to take those steps recommended above, so as to make our proposals a reality in a reasonable near future.

210. For the management, control, and supervision of these institutions, we think ample experience can be found within the Province itself, both in the organised services, and in the staff and directors of the various concerns, or constituencies represented on the University. If private interests or individuals fail to meet this need of the Province in the matter of founding and working such technological institutes, the only alternative is for the needs of the Province to be met by Government action, or by an expansion of University activities into new fields which would yield new resources for that body itself to provide for this great need of the Province. If Government action is to aid in solving this problem, and private munificence fails, the former can only be financed by some form of taxation.

211. Even if the University takes the lead in this direction, it would have to be financed by Government to a large extent, which, in its turn, would obtain the necessary wherewithal from taxation. Averse as we may be to the increase of taxation, without any immediate return, in these days, when the burden of taxation has begun to be appreciable, we would, nevertheless, suggest that, inasmuch as the developments are expected to add substantially to the material wealth of the Province, the additional taxation imposed to finance such activities would more than repay itself in the long run. The initial cost of founding all these various institutes would total perhaps a crore of rupees, or even more, which could be met out of a special loan raised particularly for this purpose, bearing a low interest and repayable in fifty years.

212. The working cost, we may add, will not be so heavy after all as to make it utterly impossible for the Province to bear. Reasonably estimated, the cost of working all the varied institutions of a technological kind may not exceed Rs. 15 lakhs a year in the first instance, for years to come. Fifteen lakhs is, no doubt, a considerable sum to be added to the resources, already very slender, and likely to be further depleted by certain other equally urgent demands upon the provincial purse. Nevertheless, a reference to our Note on Finance for the realisation of our various proposals will go a long way to show that the situation is not altogether hopeless, if Government has, as a last resource, to find the wherewithal for the establishment of these departments of technology.

213. The University itself may also be endowed in kind, say, by making over to it ownership interest in certain sections of land, to be newly developed and brought under the plough; or in the development of the various sources of important mineral wealth, which in course of time would pay for the capital as well as interest in arrears of all the investment needed by the University in this connection. But university tradition in this country in recent times has kept the people concerned with university administration severely aloof from matters of such practical moment; and so we fear the suggestion for an adequate endowment of the University in kind is a somewhat unusual step to recommend; and we, therefore, would not emphasise it too much.

214. For our part, we think that the idea of endowing the University with wealth-yielding resources, sufficient to enable it to meet all the demands that can reasonably be made upon it, is worth exploring, if only to promote the fullest possible development of the highest research, technique and training in the University that, for lack of such resources, may be unavailed of. A full sense of real responsibility will be created in those concerned with the University; an adequate appreciation of the relations between the work and its return will be possible, which may go a long way to solve sociological problems; and Government would be relieved of a most arduous, complicated and delicate task for which it may have neither the energy, nor the necessary experience and enterprise.

215. Other directions in which the University can add to its financial resources without securing any endowment in land, or other forms of property from Government or private interests, may be found in such profit-making activities as the establishment of a University press, or the provision on somewhat commercial lines of tuition and guidance for those intending to compete for the higher public services examinations. The establishment of a University press will not only save considerable expenses to the University in its ordinary work of printing the proceedings of the University bodies, examination papers, and the like; but if the work of printing and publishing text-books or those recommended for study in the various stages of education in the Province is also added to the functions of the University press, there is every reason to believe that a substantial surplus may be obtained from this source. The books printed and published by such a University press would, of course, have to be priced fairly low. But as the production of such books, etc., will be on a very

large scale, in response to the increased number seeking University education, the low price would still leave a good surplus for the University after meeting all expenses.

216. We are not blind to the dangers of creating such an artificial monopoly of books of study and material needed for education, even on narrowly educational grounds. The price of the books published by the University press, and recommended or prescribed as text-books, will have to be fixed at a very low level, so as to be within the means of all who need such books. The average rule for the guidance of the University press authority would be to charge a price double that of the actual cost of production, including printing, paper, binding, and publishing. The commercial practice, in this behalf, is to charge four times as much, in order to leave not only sufficient margin for the agent's commission, but also a reasonable profit for the publisher himself. The University can dispense with both these items; and the cost it has to make up for lies mainly in the actual expenses of printing, etc., and the honorarium, if any, given to the compilers or authors of such works. If the latter is fixed at 20 or 25 per cent of the published price—a handsome proportion in view of the large sales to be expected—the rule of charging a price double the cost of production would leave a considerable margin for the University to pay the running expenses as well as the limited commission it may have to pay to the agents for the sale of such works.

217. We do not consider, however, that this latter difficulty would be very considerable, in view of a practical monopoly which the University will have in this regard. But we consider that if suitable safeguards are adopted, this danger may be minimised; and the service to the University finances may be maximised. The establishment of a press would, no doubt, involve considerable capital outlay for setting up printing machinery, and providing the necessary buildings and other equipments. It would also be necessary to incur considerable running costs for the salaries and wages of the staff and the material needed, such as paper, ink, etc. But capital cost may be defrayed out of the special educational loan we have already referred to in another section of our recommendations; and the running costs will be more than met by the earnings of the press from the sources mentioned above. We would, therefore, suggest that this possibility may be explored by some

special committee of the University itself, in collaboration, if so desired, with the authorities of the Department of Education, so that the fullest economy can be made, and yet the largest service rendered to the public of the Province. Government already maintain a press, which is for them a losing concern. If this additional business is brought to the press, the present excess of costs over earnings may be wiped out, and a good surplus created, which may be placed at the disposal of the University for the purpose we have named.

218. The alternative of providing courses of study and training with a specific commercial utilitarian end, and charging adequate fees for the same, is also another source of income to the University, which would vary with the possibility of utilising the existing staff, buildings, equipments, etc., for the purpose without additional outlay. Universities in India have, up till now, given a wide berth to such directions in which the University resources in the matter of staff and equipment could be diverted or utilised. We think the time has come, with the advent of self-government in the country, and the necessity to organise properly, not only the public services but also the semi-public services under municipalities, district boards, and other public authorities, to think seriously of this device for providing well trained public servants. For all these bodies would need specialised talent for which competitive examinations will have to be organised. The University alone can supply this need. As the public seeking to avail themselves of this advantage would *ex-hypothesi* be in a position to pay for such benefits, it is not unreasonable to levy fees for this additional service which may not only recoup the University for the daily needs but also leave a surplus. This, therefore, is also a suggestion which we would earnestly recommend, be fully considered by the University authorities, in conjunction, if necessary, with Government. The representatives of other semi-public services in the Province may also be consulted; and ways and means devised for giving effect to them, in the spirit and for the purpose we have mentioned.

219. If the University institutes courses in its post-graduate departments in science, arts, or technique, the specific degrees or diplomas to be awarded for marking the proficiency attained in any such branch by any candidate must have some relation to the exact nature of the subjects studied. A post-graduate degree in arts would, in mere fitness, be a Master's

degree in Arts (M.A.) or a Doctorate in Literature or Philosophy (D. Litt. or D. Phil.). In Science, on the other hand, Mastership in Science (M.Sc.) should be given for advanced study of a particular branch [M.Sc. (Chem.)]; or Doctorate in Science (D.Sc) for any specially new contribution, which definitely takes forward the particular science, or puts a new phase, as it were, on its development. A slightly lower stage of research in scientific subjects, which may consist in regrouping known facts and drawing new conclusions from the same, may also be marked by an advanced degree, such as Doctor of Philosophy (Ph.D.) the term philosophy including in this connection all natural and applied sciences. It has of late become customary to grant the degree of Ph.D. even for advanced studies or researches in humanistic branches. We consider, however, that the degree of Doctorate should ordinarily not be conferred, except in recognition of some published work of recognised value, making a distinct contribution and advancing definitely a step forward a given branch of study.

220. In the Faculty of Law, the corresponding degrees may be the Master (LL. M.) or Doctor of Laws (LL.D.); while in Medicine and Surgery it may be similarly Master of Medicine (M.M.) or Master of Surgery (M.S.), or Doctor of Medicine and Surgery (M.D. and D.S.). If any specific subject is studied, such as biology or biochemistry; in the general Faculty of Medicine, or any special branch of mathematics or physics, it may be indicated by a diploma, over and above the ordinary degree which marks the proficiency in the main subject with special emphasis on the particular subject. A special diploma in Dentistry, Radiology, Ophthalmology, would add a specialist's qualification to the Doctor of Medicine or Surgery which would be valuable in itself.

221. The award should be, as a rule, the result of special written work, which may be called a "thesis" if necessary even in the first postgraduate degree,—a Master's degree. The "thesis" may be combined with some papers, or additional test, which may be provided by the appropriate University authority in that behalf. In the higher degrees, particularly that of Doctor of Letters, of Philosophy, of Science, or of Medicine, it would be best to have some definite written work previously published as the basis for the recognition. Such work should embody the results of specific research, and make a definite contribution to the advancement of the particular science. It may be that, in these cases also, some additional

test, not included in the written work, in particular languages, for example, may have to be specified to ensure the candidate's ability to study his material in other languages besides the main language of instruction adopted in the Province. The written work for a Doctor's degree need also not be prepared exclusively from the point of view of obtaining such a degree. It may be some work already published, jointly or separately by the candidate, to which some specific additional contribution is made for the purpose of obtaining the degree. The degree would thus be on the combined work, both that already published and that specially added for this specific purpose. In every case, of course, the written work would imply some original research, involving a new contribution to the advancement of the particular science, or a restatement of known facts of that science, with new conclusions drawn therefrom, or old conclusions stated in a new way. For this purpose we think it unnecessary to insist upon regular training under a particular teacher, or in a given institute, though the University should provide all necessary facilities. We consider it best, in the interests of the student, that the latter be left free as far as possible to prosecute his own research, prepare his own material, and present his own thesis, without any aid, stimulus, or spoon-feeding from any individual teacher. The degree, we may add, should be a uniform recognition of such work of every student, without any further classification into specially creditable performance or otherwise. Let each such effort, which must necessarily be published, be judged on its own merit.

222. There is a vast field for research, both in the social sciences and in the applied science or technique, which concerns the utilitarian requirements of life. The University is the only body which can provide instruction as well as guidance in such research, in arts and humanities including history, philosophy, language and mathematics, or natural science of all kinds, and applied technique; or again, in the sociological field including law, economics, theology, history and archaeology or again in professional studies of medicine, or engineering. It is not absolutely necessary that every one of these subjects be catered for by the University, but only as many selected for research as are necessary for the Province and its life. These the University can help by establishing chairs, organising lectures, making grants towards the publication of the results of any such research by postgraduate teachers or students, or by offering special

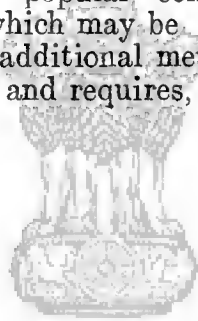
scholarships for carrying on such research. The establishment of chairs or departments in particular branches may involve considerable cost, both in recurring expenses and in original capital outlay, especially in regard to the provision of the necessary library and laboratory facilities. But these, if incurred at one central place, would be far easier to provide than if scattered throughout the Province. The benefits would also be greater and more easy to co-ordinate, if these facilities are provided in some central place, rather than they are completely neglected in their higher postgraduate stages. We would, accordingly, recommend that, in some selected branches, such as economics, sociology, history, philosophy or certain selected languages, postgraduate departments of training and research may be established, so that the University's work may be up to the requirements of the Province in this behalf.

223. In applied sciences, or matters of professional and practical utility, we consider the suggestions already made in the earlier sections of our Report will more than meet the needs even of postgraduate training and research. The University, as such, would not have to provide in those branches its own chairs, libraries, laboratories, museums, etc., from its own resources. Publication grants for research work, studentships, prizes, and the like may, however, be made on a more generous scale than is the case so far in every part of the Province, so that postgraduate work and research may not be starved in outlying centres.

224. If the result of research work in any department remains unknown to the public, such research would have been in vain, without any benefit to the advancement of learning, and the utilitarian side of life. We would, accordingly, recommend that every effort be made to arrange for publication of all satisfactory or approved research work, either through a press of the University's own, or by means of grants-in-aid to approved research workers for the specific object of publishing the results of their researches. The question of a press of the University's own has been discussed in another connection. Here, we may note that the University may have its own journal, the several sections of which may be devoted to the several departments of arts, science, and technology, which are being particularly cultivated in the University. Research work, done in or under the auspices of the University, should primarily be published in the University journal or journals, so that no such work is altogether lost for

want of publication, or is first published in centres remote from the Province. At the same time, it may be added, if there are organised All-India publications, which are devoted to the publication of specific research work in abstract or applied science, the University may contribute to the maintenance of such All-India specialised journals, so that the status and importance as well as publicity to the contributors from the University may be fully assured.

225. Summaries of extracts from these publications, or abridged versions for popular use, may be prepared by the research workers themselves; and given such publicity as may be deemed appropriate in each case, in the daily or periodical press, or any other means of publicity that may be devised in that behalf. Organising lectures of a popular kind for a wider publicity of such research work, or including the results of such work in radio talks for popular consumption, wherever the subject matter is one which may be deemed to be of general public utility; or other additional methods of giving publicity that such work deserves and requires, may also be employed.



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## APPENDIX I.

*Memorandum on the visit to Jamshedpur regarding the institution of an Industrial Technological Institute in that place.*

1. Prof. A. S. Khan and myself visited Jamshedpur, as requested by the University, etc., Sub-Committee of the Education Reorganisation Committee, on the 5th December, 1939, and had a conference of over two hours with Mr. J. J. Ghandy, the General Manager of the Tata Iron & Steel Co., Ltd., the late Mr. P. N. Mathur, Superintendent of Duplex Plant at Jamshedpur, Mr. S. N. Roy, Superintendent of Training Institute at Jamshedpur, and Mr. K. Khosla, Personal Assistant to the General Manager.

2. This discussion took place after we had visited and seen for ourselves the Technical Institute, including the Apprentices' section, and the training workshops attached thereto, as also the research laboratory. The Technical Institute, we need not add, is maintained exclusively by the Tata Iron & Steel Co., Ltd., for purposes of training up its own superior or skilled personnel. The apprentice scheme, divided into three classes, A, B and C, provides for this personnel needed for the highest ranks in the company's service, as also the skilled workmen. The whole equipment and working of the institute are, therefore, motivated and directed exclusively to this end.

3. The research laboratory, similarly, is intended to serve the requirements of the company only. It is an exceedingly well-equipped laboratory of the highest value, no doubt, to the company; but not designed so as to serve the purpose of an Industrial Technical Institute of the kind the Sub-Committee had in view. With some additions, however, the research laboratory could be developed to the required standard for general utility purposes of an Industrial Technical Institute of the highest grade. Workshops or other training facilities would, of course, have to be added, at least in so far as the Tata Workshops themselves do not provide such training and facilities, if the general idea is adopted for establishing an Institute of Industrial Technology for training personnel of the highest specialised, scientific skill for the Province of Bihar.

4. In the conference which followed with the gentlemen named above, the authorities on behalf of the company showed themselves to be quite sympathetic to the principle of our suggestion. But they pointed out that the institute, as it was working now, was entirely for the service of the company and meeting its own requirements for skilled personnel. The company had, in the past, been accustomed to train people from all places, and receive grants from the Government of Bihar, as well as the Government of India and other Governments; but, found in practice that system not quite convenient, and have, therefore, discarded it. The institute, as well as the laboratory are, therefore, maintained exclusively at their own cost, which amounts to over 2 lakhs of rupees. In addition, the company is maintaining several primary and high schools, has taken part in the literacy campaign, and otherwise co-operated with Government hitherto, in all their educational schemes, exclusively at the cost of the company. The exact figure of all this cost to the company was not given to us, but we understood that it would run into several lakhs.

5. With reference to the specific suggestion that the representatives of the University, etc., Sub-Committee of the Bihar Education Reorganisation Committee made for the building up of an Industrial Technical Institute in Jamshedpur, with, perhaps, the existing institute to serve as a basis or nucleus, the company's representatives appeared to feel that, in view of the effort already made, it would be uncalled for for them to accept this suggestion, immediately and entirely, at their own cost. Such an institute, if established at Jamshedpur, would, in the view of the Sub-Committee, necessarily be affiliated to the University. As such, the latter would have every ground for constant interference in the conduct of the institute's affairs, not only by way of prescribing studies and laying down conditions with regard to the training of students, but also as regards the general policy and management of that institute. Students trained in such an institute may, no doubt, acquire an acceptable, and perhaps, higher academic status, though the representatives of the company assured us that, even as things stood, the apprentices trained in the Tata Technical Institute at Jamshedpur were recognised, all over the world, as having a very high academic status of their own in the trade they were trained in.

6. It was pointed out to them that, while Government fully appreciated the company's outlay and efforts in regard to primary and secondary education, in the event of the

educational reorganisation in the Province taking effect as we were suggesting, a considerable proportion of their present expenditure will have been taken over by Government as part of their general scheme for educational reorganisation. This would mean a *pro tanto* relief to the company's finances; and to that extent, they should be in a better position to devote this money to any scheme of the kind envisaged by the Sub-Committee regarding the establishment of an Industrial Technical Institute for Bihar. On this matter, however, the company's representatives did not, as they could not, commit themselves.

7. The members of the Sub-Committee next inquired of them whether, even if the company did not agree to undertake to establish such an institute at their own exclusive cost and responsibility, they would consider any proposal for combining with other leading industrialists in the Province, who might all join to set up and maintain a high grade Industrial Technical Institute for Bihar. The scheme for such a combination would, of course, have to be worked out in all its details; negotiations may have to be undertaken, and even a conference arranged between the leading industrialists in the Province and the representatives of the Tata Iron & Steel Co., Ltd., as well as of the Government of Bihar. We got the impression, in the course of that discussion—and we now believe—that such a course may prove quite fruitful; and, if successful in one case, may be even more catching in other cases, such as in regard to a corresponding institution of agricultural technology.

8. Details will also have to be worked out by expert special committees, regarding the equipment and maintenance of such an institution, the courses of studies, the nature of practical training, qualifications of the staff, etc., if and when it is to be started. But this is a matter which could well await further developments. For the moment, the most essential thing is to get the principle accepted, by the principal parties concerned, namely, that the institute is to be established, with the help of some such agency as the Tata Iron & Steel Co., Ltd., or in co-operation with the leading industrial magnates in the Province. All other points of details can be easily settled by the appropriate authority, once this general principle is adopted.

9. On the whole, our impression is that the authorities of the Tata Iron & Steel Co., Ltd., would be willing to co-operate with Government and other industrial magnates for the

establishment, whether at Patna or at Jamshedpur, or at any other centre which may be found convenient for the purpose, of an Institute of Industrial Technology, affiliated to the University, founded and maintained with their aid, and conducted under the supervision of the University. We, therefore, think it very advisable for Government to take steps, if they agree to this suggestion, at as early a date as may be convenient to carry on the necessary negotiations, or hold a conference between such parties, and explore further the possibilities of making this suggestion a concrete reality.



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## APPENDIX II.

*Answers to questions 46, 47, 48 and 49 (General Manager, Tata Iron and Steel Co., Ltd., Jamshedpur).*

In our opinion, to meet the capital as well as the recurring expenditure for such a Technological Institute, the leading magnates of the Province, whether agriculturists or industrialists, should be asked to contribute either in cash or in kind at least in regard to those branches of science or technology in which they are themselves interested. In return for their contribution, they will get a number of well-trained young men who will be able to do their work more efficiently, thus leading to bigger profits. It may be mentioned, in this connection, that technical education in Holland is provided mostly by private initiative and enterprise.

By running the workshop, the demonstration farm and the factories attached to the institute on commercial lines, it will be possible to earn a part of the expenses.

There will also be an income from fees paid by students.

Government should also give a capital grant and a grant-in-aid which should come out of the public revenues.

In the event of private individuals or corporations being unwilling to contribute to such a Technological Institute, Government should levy a tax on the employers for financing the Institute. Such a tax is being levied in France and is known as 'taxe d'apprentissage' and applies to all employers paying more than 10,000 francs wages per annum. The rate of this tax is about 0.2 % of the total wage bill and is fixed by the Finance Law each year. In this way the French Government realised 160 million francs in 1932 and the amount was expended on—

- (a) Vocational guidance and the training of workmen and skilled artisans.
- (b) The training of middle grades of workers.
- (c) The training of higher grades of workers and industrial research.
- (d) Domestic instruction.

Employers, however, who can prove to the satisfaction of Government that they are already spending the amount due under the tax for the training of apprentices in their own Works, should be exempted from its operation.

The Institute may be administered by a council consisting of leading agriculturists, industrialists and businessmen of the Province and representatives of Government. The council should appoint from amongst its members three committees to organise, manage and control the three sections of the Institute, viz : (1) agricultural, (2) industrial and (3) commercial. As the Institute will not be comparable to an ordinary college, the University, in our opinion, need have no representation on the council.

Government should appoint a Board of Inspectors consisting of officials and non-officials, especially selected for their expert knowledge, to supervise the work of the Institute.

Where an institution has been established by a private body to meet its particular requirements, the management of that institution should, however, be left entirely to that body as it is to its own interest to see that the work of the institution is efficient.



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## CHAPTER VII.

### MISCELLANEOUS PROBLEMS OF THE UNIVERSITY AT WORK.

We have pointed out, in other parts of our Report, that, educationally considered, Bihar is an extremely backward Province. From the lowest stages of education to the highest, considered in numbers, the proportion in this Province receiving any kind of education is relatively very small. Much more so is the case with regard to the lack of information and understanding of the problems, which affect the destinies of the country, by those who are assumed to be the rulers thereof. In a democracy, it is the people collectively who is the sovereign, and whose will alone decides all questions that from time to time confront Government, in a vast Province like Bihar, or country like India. But if these rulers, the adult mass of the people, are themselves ignorant of the very nature of the problems; if they cannot appreciate the complications involved in solving them, they are likely to make their self-government a burden and a curse rather than a privilege, and an opportunity for real self-expression and an assured progress. If this contingency is to be avoided, it is of the utmost importance that the higher education of the sovereign of the land, the adult voters of the country, should be taken in hand by the University as the only authority which can independently, adequately, and efficiently discharge this duty.

227. The average child—the citizen of tomorrow—will no doubt, be provided for in the Basic schools we have recommended; and so also that section of the growing children—adolescents—which elects, or is required, to prosecute education in the secondary stage. But, when these have finished their Basic or secondary stage, they will presumably adopt some active occupation as a means of livelihood, which will make it impossible for them to pursue their studies still further in the University. Nevertheless, it is of the utmost importance that they should not be left completely innocent of elementary knowledge which is needed for the solution of innumerable problems of self-government that every day arise in the working of a democracy. We realise the handicap on the University for shouldering

this task; and so would not make it obligatory upon it to take over this responsibility; but would only suggest that the services of the University teachers may be made easily available whenever wanted by private bodies engaged in this work. The University extension lectures, evening classes, publications, technical demonstrations and the like would, of course, continue to aid in the same task. But these would succeed in solving only to a limited extent this grave problem of a working democracy, nowhere so serious as in this country.

228. We, accordingly, recommend that, in drafting the constitution of the University, every care must be taken to see that a full and adequate provision is made to carry on the task of adult education in specific problems affecting the working of a democracy, which are today, however, simply not understood by the voters at the time of the election and afterwards.

229. This does not mean, indeed, that the University should interfere with the ordinary process of secondary education. It is really a continuation of that secondary education for the benefit of those citizens who would, ordinarily speaking, not be able to spare time to attend the regular lectures of training in the University; but who nevertheless would be anxious to benefit themselves by any such activities that the University can carry on, and so help to broaden their mind and vision into a better perspective of the true nature of the problems that confront a democracy. We would, accordingly, suggest that the constitution should make it quite clear that, while the University is not directly concerned with the organisation and management of secondary education within the Province, it must be the function of the University to provide what we call adult education, i.e., the continuation of education for the adult masses who may or may not have received the basic minimum of education, which is positively indispensable for people ordinarily going into the portals of the University. For years to come, until the whole of the scheme we have recommended in the several parts of our Report is in working order to its maximum degree, the University will have to deal, in its adult education or continuation classes, with that section of the population, which must be presumed to be lacking even in the basic minimum of education without which such activity of the University may not prove fruitful. The University must have the means and the willingness to take up this function, for there is no other organisation that we can conceive which may be able satisfactorily to carry out these duties towards the total mass of the population.

230. In the university stage, we think it would contribute to economy, as well as efficiency, if co-education of boys and girls is carried on in the same institutions side by side. Generally speaking, in this stage, the candidates would have attained an age at which the mere sense of mystery and curiosity as between sexes would have weakened if not disappeared altogether; and so certain undesirable tendencies which may be manifest in a stage near about puberty may not show themselves quite so insistently in this more advanced age-period. Boys and girls in the university stage may, moreover, be assumed to be better able to look after themselves; and may, accordingly, be trusted to keep within proper restraint of their own accord, and because of usual supervision and vigilance of the university authorities. The habit of common avocation and studies, and constant mixing brought about in consequence, would, we think, promote a healthy sense of comradeship, and an appreciation of collaborative work as between all classes and sexes engaged in the same common work. The work, moreover, if properly organised and exacted, would leave very little time and inclination to indulge in any of the undesirable tendencies mentioned above. Finally, university education will not, in the near future at any rate, be universal. Much less is it likely to be compulsory. Those who go in for it do so of their own accord; and so there is no valid objection to insisting on co-education in that stage. It would be much more economical if the same institution provides a suitable course of education and training both for men and women, whether in regard to capital equipment or even in regard to staff and other recurring expenses. A separate college in each district, let us say, for women students exclusively, may be far beyond the means of a province relatively so poor as Bihar. It would be useless to have separate colleges exclusively for women if it is not wholly staffed by women teachers. The problem of obtaining duly qualified women teachers in colleges is even more acute than the same problem in the lower grades of organised education. This consideration is thus conclusive by itself against separate colleges. We hope, indeed, that with the progress of education, as recommended in other sections of our Report, the number of women going in for collegiate and university education would steadily grow; but, at the same time, we cannot expect the growth to be so rapid and considerable as to justify the institution of separate colleges for women, from the point of view both of economy and efficiency, in each district of the Province or even each division.

231. We would also like to emphasise the fact that the mere existence of separate colleges will bring about a differentiation between the sexes which need not be stressed unnecessarily, if we want to provide a sense of comradeship and equality between the sexes in their years of higher studies and training for identical vocation or profession, service or occupation.

232. On the other hand, we realise the might of existing customs, which militate against progress in education for women in any stage, and particularly in the highest stages, under the university. These customs may be silenced to some extent, if young women are enabled to receive collegiate or university education separately from men. We have recommended, in other sections of our Report, that provision be made for separate institutions and courses for women students, wherever such be necessary, in the interest of such education itself. But in the university, we repeat, it would be more desirable to have co-education for boys and girls for collegiate and university stages.

233. This, of course, does not apply to separate hostels, or residences in the university, for men and women students. For many years to come, separate hostels for men and women would be inevitable, even though we cannot approve of separate hostels for Brahmans and Chamars, Hindus and Muslims. We think that the University, if it desires to promote the highest degree of education to spread amongst women, should shoulder the responsibility for providing separate hostels for women students under its own direct charge, or require affiliated colleges to do so under the special supervision of the senior professors in the college. For women students drawn from backward areas this arrangement is indispensable, if higher education is to spread among them at all.

234. In other sections of our Report, we have, more than once, hinted, that the satisfactory carrying out of our recommendations, in regard to the reorganisation of Basic as well as secondary education, would presuppose the preparation for a comprehensive programme of provincial development. Such a carefully planned programme would lay down the requirements of the Province in regard to each type of work, the number of men needed for it, and the training necessary for such men and women making up the entire population of the Province. If such a planned programme is prepared, it would avoid the acute problem of today in regard to unemployment among the educated classes. The present system of education

really creates that problem, instead of helping to solve it. Education is a burden or a luxury, rather than a help and strength to the recipient. The education which we have recommended, if provided in response to a Plan, will train up the number of men needed for the different occupations all over the Province; and as there is a considerable leeway to make up in regard to the material development of the Province, there is no chance of the personnel thus trained up becoming more than that required. Inasmuch as, education provided would be of each grade and type for the numbers calculated to be required for the different types of work to be done in the different branches of the provincial programme of development, institutions would be specialised in the same proportion. There are, however, some among us who doubt if the hope expressed in this paragraph will be realised. With the expanded education, they fear, a larger unemployment is bound to arise, even if large-scale industries are started. As it is, at present, all the industries of Bihar put together do not give employment to more than a very small percentage of the population. And there is already lack of market for the products of some of these, e.g., sugar which was getting in a bad way when the war commenced. Lac is still in a bad way, and mica is not much better off. Even coal mines have not been prosperous; and, before the war commenced, the copper mines and works were having critical times. We do not know what industry can supply employment to nearly 35 millions of the population of Bihar apart from agriculture, which also with improved methods is bound to throw many out of employment. We are not able to visualise at present that any planning is likely to solve the problem of unemployment.

235. This will be a marked feature in our system of secondary education, as already mentioned more than once. How far this feature would be continued in the university stage is still to be decided; but we conceive it very likely that, if a comprehensive Plan for the all-round development of the Province's resources in relation to its requirements is prepared in advance, it is more than likely that the University also will have to minister, in the higher branches of science and technique, as well as humanities it cultivates, to those items which are of immediate and practical interest to the Province in its process of planned development.

236. The University must, no doubt, have Faculties in regard to the so-called humanistic studies, in addition to

those in science, both theoretical and applied and the several professions, such as Law, Medicine, Engineering, Architecture, Fine Arts, particular branches of commerce, and the like. But all these must be cultivated so as to lay special emphasis on matters of immediate practical importance in the programme of development, for example, the science and technique of geology, mineralogy, metallurgy, etc., so as to make a specific attempt to develop the mineral wealth of the Province and the industries founded on it. This is only an illustration; but it would suffice to indicate the manner and degree to which specialisation may also occur in university education as a whole.

237. By specialisation in the University, we mean the same thing, and on the same lines, as in the Indian Institute of Science at Bangalore. There, applied science is particularly cultivated, not with a view immediately to any particular occupation, but with a view to emphasise the need for research in certain sciences and give training in such research. If the University for Bihar pays sufficient attention to the development of science and technique just mentioned, it should not ignore entirely other branches of science and humanities; but it may be content to cultivate them to a restricted degree, leaving further specialisation and higher research in those other branches to other provinces according to their particular ability, aptitudes, and requirements. We have made a proposal in another section of this part of our Report, that special branches of applied science and technology should be cultivated in the University for Bihar by inducing the interests particularly concerned in the advancement of knowledge in these branches, (e.g., the land-owning class for agriculture, metal industry for mineralogy and metallurgy, sugar and other allied industries, both mechanical and chemical, for their respective technology) to make the necessary endowment of the University for their respective purpose. If this proposal is accepted and acted upon, the process of specialisation would be effective from the point of view of education, and fruitful from the point of view of the people of the Province.

## CHAPTER VIII.

### EXAMINATIONS.

238. As has been said more than once before, the University of Patna is at present mainly an examining body. The various examinations conducted by the University of Patna, and the results at these examinations in the last ten years, are given in the statement below. It will be seen that in recent years, these results have not fluctuated very considerably.



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*Results and percentages of the various University examinations from the year 1929 to 1938.*

Years.			Matriculation examination.			Intermediate examination in Arts.			Intermediate examination in Science.		
			Number of candidates.	Passed.	Percentage.	Number of candidates.	Passed.	Percentage.	Number of candidates.	Passed.	Percentage.
1			2	3	4	5	6	7	8	9	10
1929	..	.. A. S.	2,886 1,845	1,319 587	45.7 31.8	796 544	337 210	42.3 38.6	319 212	138 59	43.2 27.8
1930	..	.. A. S.	2,725 1,462	1,457 512	53.4 35.0	677 410	275 125	40.6 30.4	350 206	141 65	40.2 31.5
1931	..	.. A. S.	3,265 1,553	1,363 443	41.4 28.5	650 432	316 150	48.6 34.7	321 204	136 58	42.3 28.4
1932	..	.. A. S.	3,924 1,038	1,416 290	36.0 27.9	775 182	277 80	35.7 43.9	382 116	136 40	35.6 34.4
1933	....	.. A. S.	4,081 946	1,199 321	29.3 33.9	803 268	320 107	39.8 39.9	391 137	147 72	37.5 52.5
1934	..	.. A. S.	4,292	1,886	43.9	902	377	41.7	419	187	44.6
1935	..	.. A. S.	4,126 782	2,080 486	50.4 62.1	773 147	400 74	51.7 50.3	381 91	210 47	55.1 51.6
1936	..	.. A. S.	4,566 982	2,443 597	53.5 60.7	727 185	394 90	54.1 48.6	323 84	137 42	42.4 50.0
1937	..	.. A. S.	5,149 1,341	2,875 823	55.8 61.4	874 204	494 98	56.5 48.0	391 106	206 61	52.7 57.5
1938	..	.. A. S.	5,691 1,430	3,509 849	61.8 59.4	911 281	513 121	56.3 43.1	394 107	242 52	61.4 48.6

Years.			Bachelor of Arts.			Bachelor of Science.			Master of Arts.		
			Number of candidates.	Passed.	Percentage.	Number of candidates.	Passed.	Percentage.	Number of candidates.	Passed.	Percentage.
1			11	12	13	14	15	16	17	18	19
1929	..	.. A. S.	528 382	201 145	38.0 37.9	60 38	31 14	51.6 36.8	106 ..	69 ..	65.0 ..
1930	..	.. A. S.	555 317	240 103	43.2 32.4	64 37	32 12	50.0 32.4	118 ..	65 ..	55.0 ..
1931	..	.. A. S.	549 341	238 78	43.3 22.8	45 30	21 10	46.6 33.3	108 ..	61 ..	56.4 ..
1932	..	.. A. S.	512 141	170 55	33.2 39.0	57 17	21 7	36.8 41.1	111 ..	70 ..	63.0 ..
1933	....	.. A. S.	538 174	179 62	33.2 35.6	96 30	30 12	31.2 40.0	110 ..	66 ..	60.0 ..
1934	..	.. A. S.	607	265	43.6	86	30	34.8	80	59	73.7
No supplementary examination was held on account of the earthquake.											
1935	..	.. A. S.	565 154	273 50	48.3 32.4	102 25	52 14	50.9 56.0	103 ..	69 ..	66.9 ..
1936	..	.. A. S.	418 115	285 70	68.1 60.8	90 15	59 12	65.5 80.0	105 ..	52 ..	49.5 ..
1937	..	.. A. S.	452 126	263 89	58.2 70.6	97 12	76 7	78.4 58.3	101 ..	73 ..	72.3 ..
1938	..	.. A. S.	493 143	302 88	61.2 61.5	85 19	61 8	71.7 42.1	83 ..	75 ..	90.3 ..

*Results and percentages of the various University examinations from the year 1929 to 1938—contd.*

Years.	Master of Science.			Dip. Ed. examination.			Master of Education.		
	Number of candidates.	Passed.	Percent-age.	Number of candidates.	Passed.	Percent-age.	Number of candidates.	Passed.	Percent-age.
1	20	21	22	23	24	25	26	27	28
1929 .. .. A. S.	14	7	50.0	72	53	73.6	4	3	75.0
1930 .. .. A. S.	24	6	25.0	76	57	75.0	..	..	..
1931 .. .. A. S.	22	7	31.8	83	61	73.4	2	1	50.0
1932 .. .. A. S.	14	10	71.4	102	79	77.4	4	3	75.0
1933 .. .. A. S.	13	8	61.5	77	66	85.7	6	4	66.6
1934 .. .. A. S.	21	17	80.9	65	49	75.3	4	4	100.0
1935 .. .. A. S.	16	14	87.5	74	68	91.8	3	3	100.0
1936 .. .. A. S.	20	10	50.0	64	57	89.0	9	8	88.8
1937 .. .. A. S.	17	10	58.8	72	62	86.1	8	6	75.0
1938 .. .. A. S.	17	13	76.4	80	67	83.7	6	6	100.0

Years.	Law Part I.			Law Part II.			First M. B., B. S.		
	Number of candidates.	Passed.	Percent-age.	Number of candidates.	Passed.	Percent-age.	Number of candidates.	Passed.	Percent-age.
1	29	30	31	32	33	34	35	36	37
1929 .. .. A. S.	265 199	125 84	47.1 42.2	174 121	151 90	86.7 74.3	53 ..	44 ..	83.0 ..
1930 .. .. A. S.	260 257	92 81	35.3 31.5	99 176	34 93	34.3 52.8	46 ..	33 ..	71.7 ..
1931 .. .. A. S.	278 262	75 93	26.9 35.4	150 146	95 64	63.3 43.8	13 38	13 33	100.0 86.7
1932 .. .. A. S.	228 250	70 61	30.7 24.4	175 144	45 27	25.7 17.7	41 ..	29 ..	70.7 ..
1933 .. .. A. S.	233 233	126 59	54.0 25.3	169 171	99 93	58.5 54.3	46 ..	33 ..	71.7 ..
1934 .. .. A. S.	158 186	55 47	34.8 25.2	181 145	103 59	56.9 40.6	17 ..	14 ..	82.3 ..
1935 .. .. A. S.	129 144	58 78	44.9 54.1	136 98	60 60	44.1 61.2	28 13	22 11	78.5 84.6
1936 .. .. A. S.	127 150	61 83	48.0 55.3	108 142	52 71	48.1 50.0	38 11	28 11	73.6 100.0
1937 .. .. A. S.	98 119	42 82	42.9 68.9	115 79	53 66	46.1 83.5	31 17	24 17	77.4 100.0
1938 .. .. A. S.	98 126	57 79	58.1 62.7	101 84	80 60	79.2 71.4	36 10	30 8	83.3 80.0

*Results and percentages of the various University examinations from the year 1929 to 1938—contd.*

Years.			2nd M. B., B. S., Part I.			2nd M. B., B. S., Part II.			Final M. B., B. S., Part I.		
			Number of candi- dates.	Passed.	Percent- age.	Number of candi- dates.	Passed.	Percent- age.	Number of candi- dates.	Passed.	Percent- age.
1			38	39	40	41	42	43	44	45	46
1929	..	.. A. S.	47 ..	32 ..	68.0 ..	48 ..	24 ..	50.0 ..	20 ..	9 ..	45.0 ..
1930	..	.. A. S.	58 ..	41 ..	70.6 ..	55 ..	29 ..	52.7 ..	66 ..	35 ..	53.0 ..
1931	..	.. A. S.	42 15	26 10	61.9 66.6	49 25	22 14	44.8 56.0	26 24	12 9	46.1 37.5
1932	..	.. A. S.	56 ..	35 ..	62.5 ..	69 ..	40 ..	57.9 ..	63 ..	31 ..	49.2 ..
1933	..	.. A. S.	64 ..	39 ..	60.9 ..	63 ..	31 ..	49.2 ..	73 ..	36 ..	49.3 ..
1934	..	.. A. S.	63 ..	34 ..	53.9 ..	71 ..	33 ..	46.4 ..	66 ..	37 ..	56.0 ..
1935	..	.. A. S.	32 20	20 12	62.5 60.0	35 29	16 20	45.7 68.9	36 25	21 13	58.3 52.0
1936	..	.. A. S.	42 15	27 11	64.2 73.3	40 29	24 12	60.0 60.0	22 23	19 13	86.3 56.5
1937	..	.. A. S.	44 15	28 11	63.6 73.3	42 18	25 6	59.5 33.3	30 29	19 11	63.2 37.9
1938	..	.. A. S.	43 6	38 5	88.3 83.3	46 20	29 11	63.0 55.0	43 27	26 15	60.4 55.5

Years.			Final M. B., B. S., Part II.			M. D.			I. C. E.		
			Number of candi- dates.	Passed.	Percent- age.	Number of candi- dates.	Passed.	Percent- age.	Number of candi- dates.	Passed.	Percent- age.
1			47	48	49	50	51	52	53	54	55
1929	..	.. A. S.	26 ..	12 ..	46.1 ..	1 ..	Nil ..	Nil ..	23 ..	23 ..	100.0 ..
1930	..	.. A. S.	29 ..	13 ..	43.8 ..	.. ..	.. ..	.. ..	25 ..	22 ..	88.0 ..
1931	..	.. A. S.	30 28	10 15	33.3 53.5	.. ..	.. ..	.. ..	24 ..	19 ..	79.1 ..
1932	..	.. A. S.	55 ..	20 ..	36.3 ..	.. ..	.. ..	.. ..	32 ..	30 ..	93.7 ..
1933	..	.. A. S.	60 ..	23 ..	38.3 ..	.. ..	.. ..	.. ..	24 ..	22 ..	91.6 ..
1934	..	.. A. S.	82 ..	29 ..	35.3 ..	.. ..	.. ..	.. ..	18 ..	14 ..	77.7 ..
1935	..	.. A. S.	51 41	18 18	35.2 43.9	.. ..	.. ..	.. ..	18 ..	10 ..	55.5 ..
1936	..	.. A. S.	50 38	23 19	46.0 50.0	.. ..	.. ..	.. ..	28 ..	24 ..	85.7 ..
1937	..	.. A. S.	42 28	24 17	57.1 60.7	.. ..	.. ..	.. ..	18 ..	12 ..	66.7 ..
1938	..	.. A. S.	29 22	18 12	62.0 54.5	1 ..	1 ..	100.0 ..	27 ..	22 ..	81.4 ..

*Results and percentages of the various University examinations from the year 1929 to 1938—concl'd.*

Years.				B. C. E.			B. O. L.		
				Number of candidates.	Passed.	Percent- age.	Number of candidates.	Passed.	Percent- age.
1				56	57	58	59	60	61
1929	..	..	A.	20	12	60.0	..	..	..
			S.	..	..	..	..	..	..
1930	..	..	A.	31	17	54.8	..	..	..
			S.	..	..	..	..	..	..
1931	..	..	A.	33	30	90.9	..	..	..
			S.	..	..	..	..	..	..
1932	..	..	A.	22	19	86.3	..	..	..
			S.	..	..	..	..	..	..
1933	..	..	A.	26	17	65.3	..	..	..
			S.	..	..	..	..	..	..
1934	..	..	A.	37	31	83.7	..	..	..
			S.	..	..	..	..	..	..
1935	..	..	A.	29	27	93.1	..	..	..
			S.	..	..	..	..	..	..
1936	..	..	A.	14	10	71.4	..	..	..
			S.	..	..	..	..	..	..
1937	..	..	A.	13	11	84.6	2	2	100.0
			S.	..	..	..	..	..	..
1938	..	..	A.	25	17	68.0	..	..	..
			S.	..	..	..	..	..	..

239. One of the chief complaints against the system of examinations, as at present maintained, is that they are a lifeless, mechanical test of mere memory. They admit of little or no attention being paid to the real work of the student, and the impression formed of that work by his teachers, or those who have come into contact with him in the course of his studies. We have already observed, more than once, that examination, as such, cannot be altogether dispensed with. Recruitment for all sorts of public service will have to depend more and more on the results of some public, dependable test or examination. But if examinations are to be freed from their vagaries; if they are to provide a real guide, a standard or a measure of the attainments and abilities, the character and competence of the successful candidate, certain modifications in the mode of conducting examinations, and the value to be attached to the results, will have to be made.

240. It may be granted, indeed, that the bulk of examination work in the University would have necessarily to be carried on by means of written question papers, and answers to the same. But the test may be varied and deepened by adding some kind of an oral examination, as well as practical test, particularly in subjects of a scientific character. In the examinations in the Faculties of Science, Medicine, or Engineering, we understand, there is a practice of having some practical test, in addition to the written answers to formal questions; and this test is given a certain amount of importance, as the following percentage of marks assigned to that part of the work shows :—

Examination.	Percentage of full marks allotted to oral and practical exami- nations.
I.A. and I.Sc. (Science subjects)	25%
B.A. and B.Sc. (Science subjects)	33%
M.Sc. ... ..	50%
1st M.B., B.S. ... ..	50%
2nd M.B., B.S. ... ..	33% oral and 33% practical.
Final M.B., B.S., part I ...	11% practical and 44% oral.
Intermediate in Civil Engineering	33% (Sessional work).
Bachelor in Civil Engineering ...	33% (Sessional work).

The practical test also includes a record of the actual work done, as shown by the diaries of the students, in regard to the examinations under the Faculties of Science and Engineering, where a record of the class work of the candidate is taken into consideration at the time of the practical examination.

241. But this, we consider, is not quite adequate; and may be supplemented by making the test much more varied, reducing, if necessary, in a corresponding degree the test based on written answers; and a greater importance should be shown to the actual record of the students' work, in the course of their studies and training. The record, it may be added, can be usefully supplemented, and made more valuable, by adding teachers' notes of the impressions formed of this work; for they have supervised that work, and instructed or guided the students in the course of it; and so should be really better judges of the real level attained by each candidate. We have made this recommendation in the case of examinations in the lower stages of education; and we think, in the university stage also, it may be repeated without any harm.

242. Another common complaint in connection with examinations is that they give one single result usually once a year; and so if by any chance a candidate should fail to pass a test, he would lose a whole year. To relieve this hardship, many universities have introduced a system of supplementary examinations, where prizes or Honours may not be awarded; but where at least the mediocre candidate can hope to save time, by making up his deficiency in particular branches in which he was found to be weak at the main annual examination in six months instead of a year. This is a desirable improvement in the system, which is further emphasised by permitting ordinary candidates to appear in groups or compartments of subjects instead of the entire examination in one lump. The same may be said of the device of exempting candidates, who have secured a given percentage of marks in a subject or group of subjects, from appearing at all in those subjects at a subsequent examination, where they may appear only for the remaining subjects in which they may have failed at the last examination. We commend this practice as likely to make the examination less of a trial and more of a real test. In the same spirit, we would generally commend the device of some condonation machinery. The Patna University already has all these devices, and so requires no further recommendation in this regard.

243. The appointment of examiners is one of the most fruitful sources of corruption and criticism. It provides ample room for the exercise of university patronage, which leads to considerable canvassing, and not always the most desirable choice. Conventions may accordingly be laid down so as to avoid any abuse of patronage, or appointment of persons by mere influence, not adequately qualified, or free from vitiating considerations which would militate against their claims. We would suggest the following general principles for laying down such conventions or regulations to govern the selection of examiners :—

(1) As far as possible, the examiners chosen for every examination should include a certain proportion of men not connected with actual teaching work in this University. This will serve to introduce an outside element, against whom no charge of a bias in favour of a particular college or individual may be possible to make. Such outsiders need not be complete strangers to the work of the students, or the ordinary routine of university instruction, training or guidance. Even if they be men carrying on similar work in other universities,

care should be taken that they are as free as can be possible from any chance of being influenced by the University authorities or personages, and much less by any candidate in awarding the result. We would even suggest that, particularly in the higher examinations, some individuals, not actually doing any teaching work in this or any other university but yet sufficiently eminent and distinguished in their various specialities by actual work they may have done, to make the examination both authoritative and impartial to the utmost possible degree, should be added to the list of possible examiners. This may be perfectly possible to secure in regard to examinations of a professional character, such as in Law, Medicine, or Engineering. It may be equally easy to secure as examiners similarly independent and impartial individuals of eminence and distinction in the more common subjects of the arts or science faculties, who would lend both authority and distinction to the test they conduct. The principle should be extended, wherever possible, to all examinations in the University; though in the highest examinations, such as those in regard to postgraduate degrees, the rule must be absolute that a certain element of outsiders must be included.

(2) One of the chief criticisms against the system of examiners as appointed nowadays is that the leading university teachers are often busy doing nothing but canvassing examinerships for themselves. If one and the same person has to examine, at one and the same time, several hundreds of papers, it stands to reason that he would not be able to do justice to the candidates, nor maintain uniformity of judgment. We would, therefore, suggest that a Regulation may well be made by the University making it impossible for any individual examiner to value more than 100 papers in any academic year, yielding not more than Rs. 100 as examiner's honorarium all-told. This also implies that no one examiner should, in one and the same examination season, hold more than one examiner's appointment in the same University.

(3) Teachers directly connected with their subjects should, generally speaking, not be excluded. They are, indeed, the best judges of not only what has been taught, but also of how it has been taught. But while we would not suggest that teachers of particular subjects be disqualified and excluded from being examiners in those subjects, we do not overlook altogether the danger inherent in their exclusive monopoly of examinership. Care must, in the first instance, be taken that teacher examiners show no tendency to repeat the same

type of tests that the continuance of one and the same set of examiners, year after year, for one and the same examination, is likely to engender. We would, accordingly, suggest that wherever possible, a certain proportion from amongst the examiners may be discontinued, after they have served a given number of years, say three or at most five; and in their place new blood be introduced, so as to assure a certain minimum degree of freshness in the examination. Teachers should, indeed, be not only examiners; but they must conduct the examination so as to introduce an element of newness. There may be some force in the contention that if all examiners every year are changed altogether, and new ones are appointed, there may be too great a break with the general traditional routine of examinations to be desirable. For our part, we think, this argument is likely to be overemphasised. If definite courses are prescribed, from which alone examiners are to select their questions, or on which alone they are entitled to base their practical test; and at the same time clear instructions are given as to the scope and nature of the questions or the practical test, men of the same qualifications and standing, whether they change every year or not, are not likely to differ very materially from one another; nor is the type of questions they select, and the mode of test they impose, likely to vary much. Nevertheless, in deference to the common tradition, we would suggest that, even if a majority of the examiners are retained from one year to the next, a certain proportion must be changed, say about a third to a half, so as to allow the freshness being introduced in the examinations and monotony or repetition being avoided. It would also help to minimise the risk of temptation to candidates to approach their teacher examiners and seek to influence the results.

(4) Teachers, or those connected with the actual work of teaching, even if appointed as examiners, should be so selected as to be free from any taint of being personally—indirectly or directly—interested in the use of the material on which the examination is based. In more explicit terms, we mean that those individuals in the teaching world, who may have written and published any such easy aids to mechanical examinations as guide books or model answers to set questions, in the past, should, as far as possible, be disqualified from appointment as examiners. For it is such people particularly who are likely to reduce examination to a mere memory test, which is the one thing we would like to see avoided in the nature and scope of university examinations.

(5) The case of those who have written works of standard authority in their subjects stands on a different footing. To disqualify such men from being examiners would be to take away from the examination that element of independent authority and fullness, which the writing of such standard works presumably conveys to the credit of such individuals. We are aware, on the other hand, that people who are distinguished for their published work in the several subjects are likely to lay particular emphasis, in the answers expected from the student, on the matter given in their own works; and so are easily liable to be partial to students who reproduce their own way of answering given questions. One remedy of avoiding this danger is to abolish the system of prescribing text-books, so that no single writer's works are exclusively to be studied from which questions may be asked in examinations. The candidates would, then, have no incentive to memorise one particular set of works. They would be free to make their own selection from amongst the list of recommended books, bearing on the same subject, more or less of equal authority, and yet of sufficient variety to constitute a broad general education to those who master them. Subject to this precaution, we see no objection to allowing persons who have made such distinct contribution to their respective science being appointed as examiners for the University; though we would repeat that, as far as possible, their selection should be confined to examinations in which their works are unlikely to be studied.

(6) Coming to the details of the examiners' work, we would suggest that, for examinations in the same subject, at different stages (e.g., intermediate, degree, or postgraduate examination) it would be preferable to have one Central Board of a fairly comprehensive number. This would help to admit of choice being made for the various examinations in that subject in the different stages, and to avoid any chance of undue repetition of a stereotyped character in the questions. The alternative practice of selecting specific examiners for each separate paper in the same subject, in the different examinations, is, to our mind, likely to be productive of more harm than good. The fullness and interconnection of the same subject in the different examinations, and the uniformity of the standard of examinations, will not be maintained quite so well by such separate individual examiners, for each separate paper, in each separate examination, as by the method of having a group of examiners for the same subject, from amongst which individuals for particular branches may be chosen for the different examinations.

(7) As far as possible, each examination in a group of papers should be considered collectively, so that the vagaries of candidates or of examiners in individual sections or papers need not entirely prejudice the whole result. A fair collective judgment may be easier to form in the aggregate result of the work, than in single sections separately. This practice would be particularly useful in higher examinations. In the lower stages, attention to individual questions may, perhaps, have some ground in its favour. In any case, we would earnestly suggest that, to avoid examinations remaining more or less lifeless and mechanical tests that they are today, it would be better to give, wherever possible, an aggregate or collective result of answers rather than as separate valuation to individual questions or even to separate individual papers. In each paper the practice has recently grown of allowing a certain amount of option to test the general knowledge of students rather than the mastery of each individual detail. This is a wholesome practice, and ought to be extended in regard to the entire examination.

(8) In the choice of every examiner, the utmost care should be taken to avoid any chance of influence being used rather than considerations of merit. Canvassing must, therefore, be strictly forbidden; and every effort should be made to see that the prohibition does not remain only a pious wish of the appointing authority. To ensure that this undesirable element is really effectively excluded, the names of the examiners should be kept secret until after the examinations are over. The appointing authority is, of course, known to be the Syndicate, or the University executive. Every attempt should, however, be made to see that the Syndicate makes no direct decision on its own initiative; but proceeds on the recommendations made by the various subordinate or co-ordinate authorities, like the Boards of Studies, or the Academic Council. This last should make the initial choice on grounds of merit, but provide a sufficiently wide field for choice by the ultimate appointing authority, to make their final selection from amongst those recommended. We know that this is not an absolute guarantee against any patronage or influence being at work in the ultimate choice of individuals. In fact it may even be pleaded that such a system would only widen the field for canvassing, and not really abolish it. But we feel that it would go a long way in securing a much larger degree of purity in the selection of examiners than is the case in the absence of any such conventions, as we have attempted to lay down.

(9) It would be very desirable if examiners could be made to work on one spot; in a concentrated manner for a given period, so as to assure uniformity of standard, and prevent any chance of influence by candidates, their parents or guardians. This, of course, will involve considerations of finance, which may not be easy for the Patna University to satisfy. The travelling, boarding, and lodging expenses of examiners made to live for 3 or 4 weeks in one place, during which time they may be at work examining papers and conducting tests, may, perhaps, be much too excessive to bear. There is also the consideration of maintaining secrecy of examination papers. On a balance of all considerations we feel the method, even though desirable, does not appear practicable.

(10) To prevent examinations being altogether merely mechanical tests, we would, further, suggest that, when all the papers have been duly marked, and the practical test is completed, examiners in a given test should all sit together, and consider and settle their final verdict after a full review of the aggregate work of every student in their group of subjects, giving full weight not only to the practical or oral test, but also to the record of impressions presented by the teachers who have guided or supervised such work of each candidate. The individual examiners, sitting and doing work, in a water-tight compartment as it were, each of his own, and leaving the result thus produced to be treated as a final decree of fate, impossible to be altered in the slightest degree, is apt to produce cases of undue hardship, which may not be the intention of a soundly organised university to encourage or pass unnoticed. The system of moderation, which is intended as a palliative of this particular hardship, may not work always satisfactorily, inasmuch as, though a moderator may sit in judgment over a group of examiners in one subject, the final result would perhaps be one individual's judgment. This is hardly different in reality from the system where each examiner is free to give his own verdict in the section of the work assigned to him. Moderation, besides, in the manner in which it is practised in most cases, is a needless financial burden, causing undesirable distinctions between the different examiners, who ought to be treated as all equal *inter se*, and whose *esprit de corps* should not in any way be undermined. We think, therefore, that some system of the kind we have suggested above, where (a) all examiners in a given subject or group sit together to give their collective aggregate verdict on the total work of

each individual, to be followed where necessary, (b) by all examiners in the whole of that examination sitting together and reviewing collectively the individual verdict in the light of the findings in all subjects or groups of subjects to decide all cases of doubt, or those on the margin of passing or failing, would be a most appropriate and effective guarantee against examinations becoming an utterly meaningless mechanical test.

(11) In examinations which comprise very large numbers, such as that of the present Matriculation, and which may be expected to grow still further in numbers, it may also serve a good purpose to introduce some kind of a condonation machinery, over and above the collective examiners' meeting, judging and pronouncing on the entire work of each candidate in the aggregate. Such a machinery already exists in the Patna University; it will only have to be readjusted to fit in with the new organisation recommended by us. After all these precautions have been taken, it is not impossible that cases very much on the margin, or of a peculiar hardship, may still arise. These would require some exercise of a revisory tribunal's jurisdiction, which can only be provided by an extraordinary machinery like a special condonation committee of the Syndicate for each examination. We consider that this is a suggestion worth adopting for all examinations, where the numbers are sufficiently large to permit the possibility of such marginal cases occurring very frequently, and requiring the use of such extraordinary authority for ensuring all-round justice and equity.

(12) Examiners, as at present working, are personally immune from any hint of censure or condemnation of their work by any authority whatsoever. Their verdict is more definite and decisive than that of any other tribunal or authority in any concern of life. This absolute power is liable to be abused. We would, therefore, suggest some device be adopted to guard against the possibility of abuse by examiners of their absolute authority. In this remark, we are not contemplating merely the possibility of corruption by examiners themselves, both in favour of a candidate, or invidiously against a candidate. We are also thinking of those more easy and common cases of inefficiency, inattention, or disregard by examiners to the scrupulous discharge of their duties, which are by no means so unknown as might be thought of at first glance. One of the commonest and most facile errors for examiners to be betrayed into, consists in their setting questions or tests far

above the standard prescribed. Cases are likewise known in every university of examiners having failed properly to examine the section of work made over to them; or having been proved guilty of inattention to instructions, or improper practices or otherwise found unfit for their work. All this should not only merit punishment retrospectively, but should require some sort of a guarantee against any further repetition of the same. Just as it is customary in most universities to have some standing authority for reviewing cases of malpractices by candidates at examinations—copying, impersonation, undue influence upon examiners, etc.—so also, we think, there ought to be some very definite authority set up to consider cases, when they come to light, of examiners charged with improper practice in one field or another. If a satisfactory case is made out against any one, power should be available to punish such offending individuals sufficiently severely to deter them and others from repeating such offences. In the case of candidates, too, we consider that an indulgent attitude adopted by many persons in a position of authority in this regard is a mistaken case of kindness towards guilty persons. We think the body entitled to review and dispose of such cases should consist of men of sufficient authority to ensure fair justice and adequate punishment of those who are found guilty.

(13) The remuneration attached to the examiners' work is, of course, the direct incentive for many of the abuses which are commonly believed to be connected with the process of selecting and appointing examiners. We realise that it is impossible to obtain such work entirely on an honorary basis. Nor do we wish that this additional work should be expected free of charge, at least from those not directly in the employ of the University. Refusing to give any additional remuneration for this additional work is likely to produce inefficient working, in addition to the further sting that people who work on an honorary basis may not be amenable to disciplinary authority, censure, or instruction even when best meant. But while we cannot, on principle, deny the grant of remuneration for examining work, we think it is desirable that the scale of remuneration for examiners should be reviewed and reduced wherever possible, in accordance with the amount of work done, as well as in accordance with the cost of living in the Province. Individuals who are already engaged by the University as teachers, and are paid for giving such instruction and preparing candidates for examinations, should not be

entitled to any additional remuneration in respect of examination work. To them examination work cannot be that additional burden which it might be on those not directly connected with the actual work of teaching or preparing candidates for the examination. We would, accordingly, suggest that, as in the case of school teachers conducting an inspection or examination of their own pupils, there should be, as far as possible, no extra remuneration allowed to regular University Professors, Readers or teachers working directly in the University or in any of the affiliated colleges, though for any outsider, the case would stand on a different footing. Here, however, is a matter on which we do not feel entitled to give a final verdict, and so shall leave it to the University authorities to consider the question in all its bearings, when the reorganised system of education is established, and a new outlook has been engendered on the scope and authority of examinations.



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## CHAPTER IX.

### HEALTH AND WELFARE OF STUDENTS.

244. Every well-organised university, at the present time, takes a deep interest in the health and welfare of the students enrolled under it. It is not only in regard to the students residing in university college hostels, or in residences recognised and approved by the university, that measures are adopted to look after, maintain and promote their physical health and general well-being. Even as regards students living with their own parents or in independent lodgings, and working in the university, the university takes every care it can to see that their general well-being, health and behaviour are in no way affected. The affiliated and constituent colleges, and the departments of practical training maintained by the university itself, are required by Regulations of university to provide for general supervision over the health as much as over the regular prosecution of their studies. Keepers of approved lodgings have also to conform to certain regulations laid down by the university, though, of course, of a relatively less stringent order, in this regard.

245. Amongst the items of the students' welfare programme, nowadays being increasingly attended to by the university, the most considerable is one in regard to their physical health, especially as maintained and developed by regular physical exercise, or training of the body. From time immemorial universities in the West, and particularly those in England, have organised sports of all kinds to train and keep fit the physique of their *alumni*. Distinction in sports, following the Greek tradition, was and is no less a passport to the coveted "blue" as that in studies. But these sports, though organised by or under the auspices of the universities, were not in the nature of compulsory requirements enforced by university rules. Those who liked might join any kind of sports organisations—cricket, foot-ball, tennis, boating, hunting, etc.—and seek to excel therein. To a certain extent these require a fairly well-filled purse for their cultivation; but then the rejoinder seems obvious, that university education was not meant for any but the rich or governing classes.

246. Organisations, again, connected with military training, drill, and discipline like the Officers' Training Corps, have not been unknown as affiliations or annexes of the universities. But these, too, at least in English and American universities, have, like the Students' Duelling Corps at some

of the German universities, been of a voluntary nature. At the present time, however, the increasing importance laid upon the physical fitness of university students has led progressively to a system of compulsory physical training, with regular drill or exercise forming an integral part of the university work. Without carrying out the prescribed minimum in this behalf, no candidate for a university examination would be allowed to appear. This may be particularly necessary under conditions like those of India today, where university students are apt to devote themselves excessively to the mere grind of studies, overlooking the demand of their physical fitness, and even of all-round cultural growth apart from the prescribed studies. It is, of course, understandable that the desire for some sort of regular physical training, as an integral part of the university work, may be insisted upon by all sections of the community; and the carrying out of such training would be facilitated if it is placed on a compulsory footing.

247. We are inclined to think, however, that even this change in public opinion is apt to be over-emphasised, and the real benefits of compulsory physical training apt to be exaggerated. The need for regular physical exercise, as contributing to the general well-being of the student community, is, indeed, unquestionable. But to place it on a compulsory basis, and make it an integral part of the university training, seems to us to give it an importance, and expect from it results, which are likely to be disappointing. If regular physical exercise is made part of the university curriculum, and intended to introduce the habits of systematic attention to one's body and its needs, we think the inculcation of such habits would be more easily attained, and the habits when formed more effectively retained throughout life, if this course is started at an earlier stage, say in the Basic or secondary education stage. The habit having been once formed, in years when an average student is more amenable to such treatment and discipline, it would be a matter of course that the same care and attention would be paid in later years in the university to the personal, physical fitness of each individual thus trained.

248. Besides, if the physical training on a compulsory basis is insisted upon in the university stage, we must also remember the consideration that the intense poverty of the masses of Indian students may make such training more a burden than a benefit. The more the body is sought to be kept fit, by regular and even violent exercise, the more would be its

demand in regard to appropriate food and living space; and the more would be the lack of it in the required proportion felt. We do not, by this argument, intend in the least to convey that physical training need not and should not be emphasised in the university, simply because the average lot of Indian students shows extreme poverty. But we would impress it upon the authorities concerned that, if the ordinary bodily needs are not met in an adequate measure in respect of food, drink, or living space, in the homes of the average student, the insistence upon a regular course of physical training is likely to lead to needless stress on a frame not sufficiently nourished; and so prove more a burden than a benefit.

249. The problem is a complex one, involving a vicious circle and innumerable ramifications. The task of relieving poverty, all over the country is inextricably mixed up with that of maintaining and improving the general health of the student community. We have found this argument of particular weight when we consider, as part of the insistence on physical training, provision made for the medical inspection of university students, and the treatment following that inspection in cases needing it. Most students may benefit by such inspection, if, at the same time, they were able to follow the treatment usually recommended for any of the common maladies from which an individual may be suffering. It is, however, open to question if the average student, or a large majority of the students, would be in a position to afford the treatment, in respect of food, leisure, holiday, or certain appliances, (e.g. spectacles) which modern medical men, trained in the West and dealing relatively with economically more advantageously situated people, are accustomed to recommend.

250. Medical inspection, moreover, of university students, even when it is made a regular institution, is apt to be like many other forms of mass production, more a matter of routine, than a matter of sufficient individual attention. Without impugning in the least the competence and sincerity of the medical men told off to examine university students, we think it not beyond the range of likelihood that, when a single medical man may have to examine three, or four, or even five hundred students in a given college, his attention to each individual examined may prove to be cursory and superficial, rather than intensive. This may partly be removed by making medical inspection not an honorary task, but in return for some slight

honorarium given in respect of each case examined. But even after applying such remedies we fear that, under present conditions, the chances of medical inspection being a perfunctory affair will not be materially diminished. We shall have, in short, to nationalise the Medical Service all over the country, say on the model of the British National Health Insurance Act, really, permanently, and radically to remedy such evils. We are, indeed, not against the system of regular medical inspection of university students; but we think no precaution would be too stringent, which would aim at making the inspection more personal, specific, and intensive. We also hold that the treatment recommended should be more within the means of the average parent or guardian than is the case very often today, which may be ideally very good, but which may not be possible to carry out by the average student, his parents, or guardians.

251. The problem here examined is, indeed, an intricate social problem, for which no single solution would be satisfactory. The system of medical inspection may not be beneficial, because the treatment usually recommended may not be within the students' means to carry out; and the treatment usually recommended is not possible to carry out for the majority of the students, because of the intense poverty prevailing in this land. Poverty in this land is the result of economic as well as social and political factors, which, in their turn, lead, to their own intensification, as well as that of the prevailing poverty, and consequent inability of the parents or the university authorities to attend to the health and welfare of the student world. And the same holds good in regard to physical training, including regular systematic exercise. We will have to reorganise not only the educational system if many of the ills from which we suffer in India today are to be efficiently remedied, but the entire social system as well.

252. In this connection let us also consider the question of providing military training to university students, again from another angle. The control of the military policy and administration of this country is, under the present constitution of India, vested in the non-responsible Government of India. The university, which is a provincial body, would necessarily find some difficulty in making adequate provision in this behalf. Military science and practice is necessarily a highly specialised subject, for which efficient teachers can only be obtained by co-operation of the central Government with

the university. Wherever university training corps, or university battalions have been formed, under the impetus given to the movement by the last world war, there has been a measure of such co-operation between the central Government and the university authorities, without which even this limited effort must prove a failure. In proportion as such co-operation may be available for the university for Bihar also, the problem will not be very difficult of solution.

253. But apart from the question of effective co-operation between the military authorities and the University, the problem must also be faced as to the extent and manner of providing instruction in military science and practical training in that department. Military history, tactics, and strategical co-ordination of transport and organisation of food-supply, medical supply, and hospital arrangements and of all the various services for an effective utilisation of the material resources of the country, both in peace and war, will require such a vast range of staff and equipment, that only a beginning can be made under present conditions by the University authorities. We consider that the opening up of an optional group of subjects in this regard,—in one of the Faculties, say that of Technology or of Science; or, if need be, by opening a new Faculty specifically devoted to the subject, would suffice by way of a beginning for the time being. The courses of studies, the extent of practical training, the degree of proficiency needed, and the standards of attainment required, must, of course, be left to committees of experts to draw up, in this as in other departments of University work. We would also enter the *caveat* at this stage that any instruction in military science and technique would be worse than useless; and all training and experience wasted, if there is not, at the same time, a guarantee of employment to those who successfully pass the tests imposed in this Faculty or department. The co-operation of the central Government would, accordingly, be needed, not only for providing instructors and funds, but also for securing employment to the personnel trained in this manner in this University, as in others.

254. The necessary preparation for carrying on military studies in the University, in the various divisions in which modern defence organisations have been equipped—Land, Sea and Air Forces—in the appropriately equipped institutions, will also have to be considered. The University, as we have recommended above, will not be in direct contact with

institutions providing secondary education, which may be regarded as preparatory to the University, at least in some specialised sections of the same. Military studies in any branch—Land, Air or Sea Forces—would also have to commence at a stage earlier than that appropriate to the University. We, accordingly, recommend that, even in the secondary stage, some provision in military studies and training may be made, so as to provide the necessary grounding for those who aspire to go in for the more advanced specialised studies in the University.

255. We cannot, in conclusion, consider the problem of military training as a compulsory and universal system, so long as the organisation of India's national defence is not entirely in Indian hands and under Indian control. Nor need we, in this place, consider the still more fundamental proposition as to the necessity and justification of force—of which military preparedness may be regarded as a symbol—in the administration of any human society. We assume, without arguing, that in the society as it is organised today, force does play an important rôle; and that, whether we approve of it or not, in our own judgment, we must be prepared for the eventuality which may require the exercise of force on our own part in mere self-defence.\*

256. The provision of adequate physical training, supplemented by military training among university students is closely connected with the problem of maintaining discipline, decorum and proper behaviour in the student population in their everyday life. This problem is, indeed, not directly connected with any particular part of university activities, but affects the entire programme of university work and the daily life of students in any department of arts or science. Opinions may differ as to the extent upto which it is possible to enforce discipline from a central authority amongst university students. Even as regards the very nature of discipline appropriate for students, there may be difference of opinion amongst competent authorities. In these days, when ideas of individual freedom and the desire for active participation in public life are so much in the air; when university students are canvassed by popular leaders on partisan issues; and when they are becoming increasingly eager to express themselves on the questions acutely agitating the public mind, the problem of maintaining discipline authoritatively in the student population becomes a most delicate

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\* Dr. Rajendra Prasad does not agree to the outlook and philosophy of life implied in paragraphs 252 to 255 on military education.

task. It may, on the one hand, amount to denying their right of self-expression, or freedom of speech, association and movement, commonly guaranteed to all citizens in a free and democratic community. As such it is apt to be misjudged by the student population. This view would also place the authorities in a somewhat inconsistent situation, inasmuch as their own professions of regard for personal liberty and freedom of opinion would at times be at variance with their desire to maintain an adequate degree of discipline, decorum and rectitude in the student world. This is particularly so for all popular Ministers of Education, who have won their own way to the front by agitation among the educated sections of the people. We consider, however, that it is not impossible to reconcile the seemingly opposing objectives of the governing authorities and the students, the former desiring the maintenance of discipline, and, in the name of discipline, a certain amount of authoritarian dictation, as regards the rules of conduct and general behaviour; and the latter demanding freedom of speech and association, or indulgence as regards such rules. If clear definitions were laid down as regards the extent to which the university authorities would be entitled, in all right-thinking minds, to enforce discipline, decorum, and rectitude amongst the students; and, correspondingly, if equally clear definitions were laid down as regards the rights of the students and their duties, by representatives of the two sets of opinion in mutual conference, we think the problem which at first sight seems to be baffling may meet with a very effective and acceptable solution. We would commend it to the authorities concerned that an early and serious attempt be made to frame liberal and reasonable rules of discipline, and at the same time to investigate the possibility of drawing up a clear Charter of the Rights and Obligations of university students, in mutual consultation as far as possible, reserving the power in some specified hands to modify these from time to time, if and when occasion should arise. Such rights and obligations on the part of students, and correspondingly also on the part of the authorities, if carefully considered as from a central stand-point, and sympathetically administered, would go a long way to avoid many of the misunderstandings nowadays common between the authorities concerned and the student world. It would help to ensure a harmonious daily life of the students, and contribute to the improvement of the general atmosphere and environment under which the students have to live and move. We are, indeed, fully aware that while rights may be very much emphasised by the students,

they are apt to overlook the corresponding obligations. But we think it ought to be no small test of the university authorities' *savoir faire* to make the students perceive the need for such obligations being simultaneously enforced along with their Charter of Rights being safeguarded. If a real endeavour is made to understand this problem and to find a solution, we think there would be little difficulty in preparing a comprehensive and acceptable Charter of the kind mentioned above.

257. In the list of welfare activities for university students, we would not like to omit mention of social and cultural activities. They would contribute to the real education of the student world, far more than the ordinary lectures, demonstrations, or even practical experiments. The social side of university life is, like the sports side, more emphasised in Western universities than in our own. We are aware that in this, as in many other desirable features of university life, there may be a possible danger of overemphasis by enthusiasts. Nevertheless, we would add that activities like those in the annual social gatherings of each collegiate institution, or special gatherings of each society, club, or association of students, within the college or the university, as the case may be, for the purpose of debate, discussion, lecture, conference, demonstration, and so on, will not only help to bring the students and teachers more and more into contact with one another on a basis of equality; but would help to widen their vision, and familiarise them with problems of daily life, in departments other than those in which any given student may be specifically interested as a student. This cannot but add to his value as a citizen in a democratic community. The social gatherings of the kind we have under review will also help to bring the different sexes and classes closely into contact with one another, and so promote a better understanding amongst these different sections of the student community, which cannot but contribute to general peace and harmony, as well as to better concerted effort for the all-round progress of the country. We have referred to these side-lights on the educational system as a whole in other sections of our Report at greater length, and so we need not repeat ourselves in this on the same subject at any further length. We would content ourselves with the observation that the variety, depth, and extent of the activities comprised within this group, which will minister to the general welfare of the student world, and also help really to educate them, in the best sense of the term, is impossible to gauge, until such activities have been systematically encouraged and developed by the powers that be.

258. One period particularly of the university year, which is capable of yielding the best results in the shortest space, from the standpoints from which the problem has been considered above, is in regard to university vacations. These are fairly long stretches of time, more or less compact, and unbroken, which at the present time are allowed practically to run to waste. There is no organised effort for a proper utilisation of these vacations. In other sections of our Report, we have recommended already that attempts should be made to utilise vacations in the various classes of schools, with a view to contribute to the general problem of education at every stage. We would repeat in general the remark, already made on this subject, with special emphasis to the university stage, not only because the vacations in the university are much longer than in the schools, but also because university students, having arrived at a fairly advanced age and attained mastery of all their faculties of the body and the mind, much greater utilisation can be made by them, if a systematic effort is made to devote the vacation to some useful work in connection with education. We trust that this will not be lost sight of by the authorities concerned; and that an early attempt will be made to devise ways and means for systematically utilising vacations for the benefit of university students.

259. We have already made our observations and recommendations on the general problem of co-education of men and women, and so need not repeat ourselves here on that score. The general principles governing those remarks of ours must also apply to the education of any other class or community of students. There are, in this Province, large numbers of the so-called backward tribes or communities, for whom special inducements will have to be provided to attract an adequate number from these classes or communities to the stage of university education. But premising the essential equality of all students, in regard to opportunities for training and work, we think it utterly inadvisable to suggest any separate provision in a separate college, or under exclusive conditions, for the university education of any tribe, class, or community. Social equality, human fellowship, and national solidarity will not be promoted, if education of any section of the community, in the very higher stage, is carried out under conditions which may suggest the least degree of exclusiveness. We, accordingly, recommend that no separate provision be made for both sexes and any class and communities of students; but that the entire structure of university education be raised on an identical footing equal and common and open to all, provided the prescribed conditions of a minimum qualification required for admission to the university is fulfilled.

## CHAPTER X.

### MISCELLANEOUS.

260. We propose to discuss in this chapter a number of questions of the gravest importance and vital bearing upon the working of the University, which are difficult to classify and include under any of the previous heads.

261. The most important and considerable of these questions, which may assume increasing proportions as time goes on, is in regard to the medium of instruction to be employed in the university stage. English is today the universal medium of instruction in the university. As, however, already pointed out earlier, important Indian languages are beginning to be recognised by universities for purposes of specialised study, such as postgraduate research in any particular language, its literature, or history. But Indian languages, however widely they may be spoken, and however ancient their cultivation, have not yet attained the dignity to serve as medium of instruction in universities for a variety of reasons. We think the most considerable of these reasons is the natural desire of the rulers of the land to impose their own medium of everyday intercourse, and the one with which they are best familiar, as the common language of instruction throughout all the universities in India. As the Indian personnel, subordinate or superior, of the new Governmental agencies began to be trained up in this language of the foreign rulers of the country, they began more and more to spread the use of that language. The result was that the corresponding Indian languages remained unequal to the strain of expressing adequately the new phenomena of a rapidly changing environment. Coupled with the initial neglect of Indian languages in the British era of our history, the real or supposed inadequacy of those languages to express the new requirements of higher learning was the main cause of the absence of Indian languages from the media of instruction in Indian universities.

262. We do not believe that, properly attended to, the leading languages of this country would fail to prove equal to the requirements of the highest stage of education in any branch of arts, science, or professions. It is, however, a fact that, due to the neglect of Indian languages over a period of nearly a hundred years, and to the spread of Western Science and familiarity with its technical English terminology to

express the new phenomena, inventions, or circumstances, the effective ability of Indian languages, even the most cultivated ones, to serve as media of instruction in the university stage began to disappear altogether. The educated section of the Indian people, and the growing circle of their imitators, joined their British rulers in an increasing use of the English language for all purposes of social intercourse, political administration, and intellectual expression, with the inevitable consequence that the Indian languages progressively declined in vogue. The languages being thus weakened or assumed to be inadequate for the requirements of university instruction, naturally, there developed no literature requisite for university instruction, such as books, or vocabularily sufficient for the purpose. The ability of the teachers themselves, as already noticed, to express their ideas in the Indian languages diminished in proportion, and the momentum against the employment of Indian languages as media of instruction in the university stage began to gather strength.

263. At the present time, owing to a strong wave of nationalist resurgence, there is a widespread desire to restore Indian languages to their proper place, in ordinary intercourse, as well as for purposes of serving as media of instruction in every stage of public education. The multiplicity of Indian languages themselves makes an argument against the universal employment of any of them, even though the sentiment of national solidarity in this country demands the substitution of one Indian language for English, which now serves as the common medium of intercourse between the educated classes of India all over the country. We consider it not impossible to make the Hindustani language, as ordinarily spoken by by far the largest proportion of the Indian people in the northern provinces, the common national language of India, by careful cultivation and common use, equal even to the exigencies of a medium of instruction in the university.

264. So far as this Province is concerned, the problem is relatively simpler, inasmuch as, by far, the largest proportion of its population is conversant in their daily life with Hindustani language. It would, thus, be for us simply a matter of intensive cultivation and development of the Hindustani language, in all departments of arts and science, so as to bring it up to the level at which it may become a suitable medium of instruction for all purposes of the University. It is difficult now to lay down a time-limit within which this aim should be consummated. But looking to the experience of the Osmania University in the matter of building up adequate

literature for instruction in all departments of arts and science in the Urdu language, we think it not at all impossible for this Province to achieve the same objective in a reasonable time. If the resources of this Province were suitably employed, and every effort was made by teachers as well as the other authorities, not only to employ habitually the Hindustani language, but also to write and cultivate it in every possible manner for technical purposes, we think, within a reasonable period, it may be possible to dispense with the present universal use of English as medium of instruction, and replace it by Hindustani.

265. We realise that this is an objective which can be attained only in course of time, but which, for the moment, may be regarded as an ideal not immediately capable of attainment, the moment the reorganised University comes into being. The medium of instruction, for some years to come, may, therefore, be English. But every attempt should be made to replace it progressively, department by department, or year after year, by Hindustani, as a carefully planned programme in that regard may prescribe. We would, therefore, commend it to the authorities concerned to consider this question from all angles, with a view to compile an adequate vocabulary, sufficient literature in all subjects, the necessary number of men and women trained to express their ideas in Hindustani, and an all-round cultivation of the language, which would, in a given period, say of ten years, suffice to bring it up to the degree of richness and versatility equal to all the requirements of the University.

266. In this connection we would recommend that Government set up immediately, a museum of national education for Bihar at Patna. Such an attempt would not, the Committee believe, cost an inordinately heavy amount, especially in comparison to the benefit derived from such an institution. The museum may be temporarily housed either at the Patna College, or in the University premises, or in a section of the general museum till a permanent structure is built. Models, maps and charts illustrating our programme of (a) Basic, (b) Secondary, (c) Professional and Technical, (d) University and cultural education, may be prepared and exhibited in this museum.

The University for Bihar, in future, should not, as has been pointed out in the Report, neglect "the promotion of general culture, historical research and artistic development".

The museum should, therefore, aspire to make special provision for the display of facts and figures as well as concrete objects relating to the history and culture of Bihar: its anthropological basis, its sociological patterns, and, above all, its arts and crafts which in the age of the Mauryas and the Guptas, vitalised the culture and art of the whole of India and of Greater India.

The architecture, sculpture, decorative art and other branches of fine arts should be exhibited by means of judiciously selected photographs, mural paintings, models, designs and plaster casts, to facilitate the study of comparative art and aesthetics.

The industrial arts and crafts, on the other hand, should be classified and exhibited on ethnic and regional basis, district by district. Starting from the prehistoric days, with the pre-Aryan settlements, through the glories of Magadhan Buddhism, through the grandeur of the Maurya-Gupta Empires, and the age of Nalanda and Vikramasila, down to the Islamic and British epochs, the museum will visualise the progress of the "Man in Bihar".

The Stone Age culture of Singhbhum and other districts, the copper industry of Musaboni-Ghatsila, the iron and steel industries of Gurumahisani-Jamshedpur, with their prehistoric backgrounds, the terracotta industry of Buxar, the stone-cutting of Chunar, etc., may be illustrated with reference to special survey-maps prepared by the professors and students of the Economics and Science departments of the various colleges.

The mental equipment of the "Man in Bihar" through the ages, should also be illustrated by a systematic collection of the largely unwritten folk literature of Bihar, in the Ho-Munda-Santal-Oraon zones, in the Aryan linguistic zones and in the Urdu-Islamic areas. The basic school teachers, teaching through the various mother-tongues, would be the most valuable helpers in compiling an anthology of the parables and proverbs, myths and folklores, legends and ballads illustrating Bihar peasant life and the priceless folk literature threatened with extinction. The professors and students of the departments of History and Literature may, with the co-operation of a few trained ethnologists and archæologists, develop the Anthropological division of this museum of national education.

267. Initiative in this task of national education may be taken, for the present, by honorary workers and by the professors and the students of the Patna University which, being founded in 1917, would very appropriately celebrate its Silver Jubilee by completing this national museum which would develop, let us hope, into a nucleus of the first Folk University of India, and the most enduring monument to the glories of Bihar. By these means the development of the cultural wealth of the Province, will, we trust, be fully attended to, and full use made of such resources as are provided by the Bihar and Orissa Research Society, or the Patna Museum. Places like Nalanda form Bihar's unique treasure-house; and the Committee are unanimous in their opinion that the Provinces' priceless fields of research be worked, in philology, ethnology, sociology, archæology, and folklore, particularly amongst the aborigines of Bihar.

268. Another problem of considerable importance to those educated up to the university stage is in relation to the advanced and still more specialised education and training in foreign countries. As a rule, these latter are presumed to have better facilities for more specialised training, especially in professional subjects or applied science. We consider that the importance still attached to foreign—particularly British—qualifications in Indian universities, and in other bodies concerned with developing India's industry, agriculture, and commerce—not to mention public administration in general—is far too excessive in comparison with the real attainments of individuals trained abroad in their specialised fields. It is easy to understand, of course, the *raison d'être* of such an invidious discrimination being made in the past and continued today, as between Indian university degrees and qualifications and those obtained abroad. But the conditions which necessitated that discrimination are happily passing away. And if the authorities now in power in all parts of the country would make an effort to emancipate themselves from the dead-weight of mere prejudice or tradition, they would realise that Indian university degrees and other qualifications, even if at the present moment not of equal value, may be easily brought up to that level, if only sufficient encouragement and attention are devoted to them.

269. Without holding, for our part, that Indian degrees and qualifications are necessarily inferior in any respect, we

may nevertheless add, for the sake of argument, that even if they were so, the problem is not how to promote facilities for education and training abroad to deserving Indian students, but rather how to improve the value of the degrees and qualifications available in Indian universities, so as to make them more easily accessible to the largest number of children of the soil. In the reconstructed University, as we envisage it, there will have to be, we think, intensive effort to make an all-round improvement, both intensively and in variety of range, in the studies and training available in the University; so that a much larger field of education and training may be covered, a much larger number benefited thereby, and a much better result derived by the Province as a whole in consequence.

270. We may avail ourselves of this opportunity to dispose of a cognate point of considerable importance to Indian students. The foreign universities—and particularly the British—do not recognize the equivalence of Indian degrees and other stages of university qualification. The result is that Indian students going abroad have to put up with a considerable measure of inferiority and consequent waste of time, which can well be avoided if the Indian degrees are accepted on a par with the corresponding degrees and qualifications of foreign universities. The problem is of particular interest to those Indian students, who, on account of the business of their parents, have to live for their education in India and go to Africa or other parts of the British Commonwealth of Nations, where their previous studies may not be recognised up to the degrees they are entitled to be recognised. The consequence is that all the time and energy devoted to the education of such moving population is practically a waste, from the standpoint of those of the people so educated who desire to continue their education further in other parts of the Empire. On the other hand, there is a tendency in certain quarters connected with Indian universities to give a pre-eminence to even the minor qualifications obtained under British auspices, such as the Cambridge Senior examinations, which in many parts are recognised or attempted to be recognised as on a level higher than the Indian Matriculation examination. We consider the latter phenomena utterly without any justification under present conditions in India; and every effort should be made to secure an absolute equality as between Indian and non-Indian examinations corresponding to one another.

271. This is a problem, we fully realise, not for a single Indian university to attempt. The attention of the Inter-University Board—an organisation of all Indian universities functioning periodically with a view to consider problems of common interest—has been drawn to this matter; but hitherto the results obtained are far from satisfactory. The backing of the authorities in India is singularly lacking, so that such endeavours as the non-official authorities can make in this behalf are bound to prove futile. The great professional organisations, such as those relating to Law or Medicine, have managed, in recent years, to obtain a measure of recognition by British universities, which is yet not entirely on a par; but which, we trust, will in course of time become more satisfactory. For the lower university examinations of an intermediate character, and for the Matriculation as well as for the degree examinations in the Faculty of Arts, an equivalent recognition still remains to be secured from non-Indian universities, particularly the British. We trust the reorganised Patna University will make every effort to obtain this recognition, or join other Indian universities in doing so.

272. While insisting, however, upon the desirability of improving the standards and curricula in the University in this Province, we are not altogether blind to the value of foreign travel and training abroad, particularly of a practical nature, in factories, workshops, or other institutions of the required character, for Indian students trained in specialised fields in Indian universities. We consider, however, that this would be better achieved by an organised system of selecting well qualified scholars for training abroad in specified branches, than by leaving this matter to individual caprice of inexperienced individuals. Wherever the merits of a duly trained candidate justify the choice, and the necessities of the Province require, we would recommend the adoption of a system of liberal and numerous scholarships for foreign training, to help the individual scholars. These may be selected from those fresh from the university, or those actually serving in some practical capacity, where they have provided proof of their efficiency and proficiency in the particular department they have selected. Training abroad may help them to improve the range of their knowledge, and widen their practical experience, so as to make them much more serviceable to the Province. While we are definitely against any encouragement by employment in a preferential manner to those trained

initially abroad, we recognise sufficiently the educative value of foreign travel earnestly to recommend this system. All teachers and professors in the University in every department, as well as other workers in professions, industry, business, or public administration, should, at one time or another of their working career, receive facilities for training and travelling abroad, in order to widen their experience and enrich their capacity for service in this country. Rules may be made for selecting with justice and impartiality individuals qualified for the purpose. Conditions may be laid down, at the time of awarding the scholarships, or granting deputation allowances, or study leave or other such facilities, for their pursuing the required courses of training or studies in a stipulated place, for a prescribed time, which would ensure the Province against any wastage of the money so spent, and also against any failure of return from the service of individuals so trained. And, of course, on their return from such training abroad, they must be guaranteed suitable employment, or continued in the post they formerly occupied.

273. In this connection, we would like to avail ourselves of the opportunity to point out that the facilities nowadays made available to Indian students going for advanced specialised training abroad are extremely meagre. Complaints are made, time and again, of the unwillingness of foreign, and particularly of British, manufacturers or technological institutes, to admit Indian students, and give them sufficiently wide practical experience in the technique or organisation of their work. The Indian authorities responsible for the proper education of Indian students going abroad, whether as Government scholars or otherwise, are unable or unwilling to utilise effectively the usual weapons at their disposal for making the managers and conductors of such foreign institutions, where Indian students go for more specialised and advanced training, to help them properly. Public opinion in India has, time and again, suggested that, for instance, the power derived by the Government of India from the purchase of stores abroad, or the wide employment given to foreign experts, should be utilised as a lever to get admission of Indian students in the particular works, factories, banks, and business houses, as well as institutions of abstract learning. A stipulation should be made in every agreement for the purchase of stores, or employment of foreign experts to provide for adequate training facilities being made available for Indian students or apprentices desirous of such training. In

the event of any breach of these stipulations, the works, factories or organisations supplying Government requirements in India should be removed from the list of sources for the supply of such material.

274. Adequate supervision of Indian students going abroad for higher and specialised training in order to ensure that they do not waste the opportunities and resources made available to them, but that they make the fullest possible use of the same, must also be secured in some authority responsible to the Government of India, or to popular opinion in this country. The present arrangements in the High Commissioner's office in London, with a special department of adviser to Indian students, is not only inadequate for this purpose; its fundamental objectives seem to be wholly different from that which the Indian sentiment would require in this behalf. The present arrangements act hardly better than a mere channel of communication between intending students and the authorities of institutions they seek to work in. Complaints are not unheard of altogether that this organisation rather aims at securing for itself effective power or influence over Indian students in foreign countries, than in obtaining for them the fullest opportunities and facilities for prosecuting their education and training. They are anxious, indeed, to see that the foreign institutions and organisations do not admit Indian students, except through their mediation. But while considerations of space and equipment may lead foreign universities or industrial establishments to restrict the admission of such students into their works, the influence of the India Office organisation is not always exercised in favour of Indian students, and with a view most effectively to secure them the amplest possible opportunity. We consider it, therefore, desirable for the Government of India immediately to devise some substitute organisation, which, while located in India, so far as its headquarters are concerned, would, nevertheless, have agencies in foreign countries, not necessarily England, where they could serve the requirements of Indian students more effectively than is the case today. Government must likewise use the power derived from the purchase of foreign stores and materials, as also during the negotiation of special trade agreements with other countries, to obtain every possible opportunity and facility for Indian students to train themselves abroad in any selected specialised field of learning research, or technology.

275. We may also refer in passing to the institution of apprenticeship, to which we have given considerable prominence in the earlier sections of our Report. In the university stage, the idea of apprenticeship, though not of a higher degree, need not be altogether eliminated. In every case, at least of training in practical professions or sciences, we think the necessity of organised apprenticeship, in order to provide the requisite amount of practical experience before a student can take up responsible work in any capacity, cannot be overemphasised. The University must, accordingly, in consultation with representatives of industry, agriculture, commerce, and public administration, devise a suitable universal system of apprenticeship. It must lay down the qualifications for admission as apprentice, rules of discipline and conditions for obtaining experience required in any particular business, profession, or training. If a full period of apprenticeship is made an indispensable condition for obtaining employment, the value of practical training of this kind will be much better appreciated. Contact would also be much more deep and varied, as between the University and organisations representing industry, agriculture, or commerce in the country—not to speak of all forms of public administration. The University would thus become a much more popular and more widely respected body, discharging functions definitely of a more immediate utility, on a wider scale, and at the same time increasing the spread of its net over a far larger section of the population than is the case today.

276. A final question of miscellaneous importance that we may consider in this connection is in regard to the present endowments in the University. These endowments will, we think, be continued in the reconstructed University for this Province, unless any portion of them be earmarked for the benefit of the people in Orissa. The basic idea of endowments for a university seems in this country to have been, from the start, somewhat different from what it has been in other countries, or even in India in her early history. University endowments are created in India, generally speaking, in the shape of scholarships and prizes to deserving students, commonly awarded as the results of some test or examination. They have been restricted in availability to particular castes, or communities, or sections of society of a parochial or provincial description. We think the time has come when scholarships and prizes should not be awardable on merely communal or sectarian basis, nor even on provincial origin.

They should all be co-ordinated in a common fund for the general advancement of learning in any form deemed appropriate for the particular case. We also consider that such endowments should henceforth take the shape increasingly of establishing specific Chairs, or Departments, or providing libraries, laboratories, museums, or other means of equipping the University more effectively to discharge its wider functions than was the case until now, so that the University may become independent, and may also, at the same time, be able to cope with its requirements much more efficiently than has been the case in the past.



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## CHAPTER XI.

### FINANCE.

277. The financial resources at the disposal of the University today may be summed up, according to the University budget for 1940, as follows:—

<i>Revenue side.</i>			<i>Expenditure side.</i>		
Item.	Amount.	Per-centage.	Item.	Amount.	Per-centage.
Government grant ...	21,000	6.2	Establishment ...	52,342	15.1
Examination fees ...	2,76,375	83.2	University readers ...	600	0.2
Other fees ...	16,000	5.0	Contingencies ...	16,845	4.8
Registration fees ...	4,871	1.2	Remuneration to examiners.	1,30,000	37.7
Miscellaneous receipts.	14,511	4.2	Examination expenses	20,600	5.9
Publication account	600	0.2	Stock department	3,300	0.9
	<u>3,32,957</u>	<u>100%</u>			
Less refund of receipts.	1,000		Travelling and inspection charges.	34,600	10.2
	<u>3,31,957</u>		Printing charges ...	27,400	7.8
Net total receipts	3,31,957		Miscellaneous charges	59,556	17.4
Opening Balance ...	37,909			<u>3,45,243</u>	<u>100%</u>
Total ...	<u>3,69,864</u>				
			Less 500 refund of expenditure.		
			Net total ...	3,44,743	
			Closing Balance ...	25,113	

278. Considering these items on either side of the budget in detail, we find that Government grant, amounting to a little over 6 per cent of the total receipts, is earmarked for establishment charges. It consists of Rs. 18,000 from the Government of Bihar, and Rs. 2,000 from that of Orissa, while Rs. 1,000 is earmarked for the travelling allowance of the Vice-Chancellor. Against the total cost of establishment budgetted for Rs. 52,342, constituting 15.1 per cent of the total expenditure, a contribution of Rs. 20,000 from Government is hardly 38 per cent. Government contribution, however, cannot be expected to be increased on this account, as the establishment charges may be taken to be the cost of administration of the University affairs which must be met out of the general fund of the University.

279. If Government contribution is to be increased, as it must be, it must take another shape as we suggest below. But it may be added in this place that, in future, in proportion as the programme of public education expands on the lines suggested in the earlier sections of our Report, it would mean that expenditure on account of Basic and secondary education would go on progressively increasing; and would be far too great to permit of any substantial diversion of public funds on account of expenditure in the highest stage of education, namely, university and scientific research. We have been obliged to recommend that the only branch or stage of education, which must be regarded as among the fundamental obligations of a civilised Government, must be the provision, free of cost to the recipients, on a universal and compulsory basis, of Basic education. That alone will absorb between 80 per cent to 90 per cent of the total expenditure budget on account of the public education in the Province; and such proportion of the balance that remains available will have to be diverted to the system of secondary education, as recommended in another section of our Report.

280. This does not mean, however, that we consider Government owe no obligation to finance any part of the highest stage of education in the University, and for scientific or cultural research. Education in all stages, and particularly in the highest stage, is bound to be costly; and cannot be maintained by the State out of the income from fees only. Some contribution must, therefore, necessarily be made by Government on this account, not only in order to mark their sense of valuing this highest branch of education, but also to serve as an example to other bodies, corporations, or individuals, to promote the cause of the highest branch of education to the utmost of their ability.

281. At the present time, according to the Annual Report of the Director of Public Instruction in the Province for 1937-38, the cost of University education all-told, and from all sources, is returned as:—

	Rs.		
University ... ..	...	...	3,05,525
Arts colleges ... ..	...	...	10,77,404
Professional colleges ... ..	...	...	5,14,928
or a total of			<u>18,97,857</u>

Out of this, Government funds contribute 7.17 per cent towards University expenditure proper (being the grant already mentioned), and 66.41 and 78.65 per cent on the Arts and Professional Colleges. This means that Government spend about Rs. 11,00,000 on account of the university stage of education in a total Government budget of about Rs. 45.00,000 in round terms. This amounts to about 18 per cent of the total expenditure from Government sources on education in all branches and stages. If Government agree to make over to the University what it spends today on this branch, and make a *pro rata* increase in proportion to the widening of the scope of education in the primary as well as in the secondary stages, the resources at the disposal of the University would be considerably increased.

282. The colleges and University departments would thus become the responsibility of the University to conduct; but the resources made available will, generally, suffice for conducting those institutions. We have indicated, in other parts of our Report, how a *pro rata* increase would occur in the number of those seeking university education arising out of the broadening of the Basic as well as of the secondary system of education. We consider that about 1 per cent of the total number of pupils, going in for Basic education in a system of universal compulsory education in the Province, would seek university education. This would mean that the present number of university students in all colleges put together would have to be increased several times, even though only 1 per cent of the total school-going population comes up for education in the university stage. The provincial budget for education would have to be proportionately increased, as pointed out elsewhere. And if the University resources are improved to this extent, the requirements of education in the highest stage would not suffer on account merely of lack of resources.

283. What Government are required to do in regard to the university stage of education, so far as colleges and collegiate institutions maintained by them are concerned, public bodies and private individuals, as well as organisations of specific interests concerned with the university stage of education, will have to do in the case of the institutions maintained by them also. That is to say, they would have to make the financial resources at their disposal for the maintenance of such colleges or departments of the university level

available to the University, to be managed by that body with due co-ordination for bringing the maximum result with the minimum cost in this instance.

284. The most considerable source of income at the disposal of the University at the present time consists of the examination fees. They account for nearly 83.21 per cent of the total income in the University. In proportion as the number of pupils in the University increases, the fees charged for examination in that branch of education would also increase. The resources of the University would, accordingly, improve. Income from tuition fees would likewise increase, as the University would have made over to it under our suggestions, all the assets and liabilities for maintaining all colleges. The University revenues from this source of examination and tuition fees combined may be expected to go on progressively increasing till it aggregates, for 50,000 undergraduates, Rs. 20 lakhs. Tuition fees in the various colleges account at present for Rs. 4.45 lakhs in round terms, or 30.73 per cent from Arts colleges, and 20.20 per cent of the total cost of professional colleges. If they are also added to the resources of the University, and a *pro rata* increase in this source is made as well, on account of the increase in number anticipated in consequence of our recommendations, the resources for conducting such institutions by the University would correspondingly be benefited. Even if some reduction takes place in the scale of fees now charged in the colleges, as well as by the University for its several examinations, in order to bring such education within the means of the relatively poorer sections of the community, this source will go a long way towards meeting all the increased expenditure resulting from the expansion and extension of the University's work.

285. The other items of the University revenues indicate a very limited scope for expansion. Such enterprises as the University Press and Publication Department may be exploited easily for improving the resources of the University. These at present yield only a very small amount of revenue. But if they are conducted on a commercial basis, and worked economically in conjunction with the entire Department of Education, for providing, at the lowest possible cost, books and other instruments of education, which at present have to be bought from private entrepreneurs charging their own profit for supplying such materials of education, there would, we venture to think, result very substantial improvement in the University's resources. It is difficult to make an estimate

of the income that may be derived by the University from this source when properly developed and worked. But we have no doubt that a considerable expansion may take place if such services are rendered from a central place, and a reasonable charge made for the same.

286. The same may also be said in regard to certain other "productive" activities, which the University may well undertake as part of its duties, and so add to its revenue. We particularly refer to such items as the provision of specific training for those seeking entrance in the public services examinations, for which tuition fees may be charged on a fairly high scale, leading to a reasonable surplus for the University.

287. The University may also add to its income through its professors, laboratories, libraries, and other means of conducting research work, or investigating specific problems, for industrial, commercial, or agricultural organisations in the Province. This is a source of considerable possibility which needs very careful thought and development. No reasonable estimate, however, of the income derivable from this source can be worked out at present, as the item is all but unknown in this Province, as also elsewhere in the country; but that it can be made a considerable success by itself, if only the University properly develops it, cannot be denied.

288. Of the items of University expenditure, the most considerable is the remuneration to examiners. It accounts for nearly three-eighths of the total expenditure. This item is bound to grow as the University expands; but not in the same proportion as the income possible to be derived from such expansion. Assuming that the examination charges grow in the same proportion as the number of students grows, even then the total cost will not be more than 6 to 7 lakhs, as against an estimated income from examination fees above of nearly 15 lakhs. It is possible to consider reduction in the scale of charges for examination work; but the saving likely to be effected thereby may not be very substantial. We would, therefore, not base our recommendations on this assumption, though we would invite the attention of the University authorities to consider the possibility of reviewing the scale of examiner's remuneration, with a view to its reduction wherever possible.

289. The charges in connection with examination are, however, not all included in the remuneration to examiners.

There are other examination expenses proper which amount to about 6 per cent, and the stock department may account for another 1 per cent. These would also increase in proportion as the number presenting themselves for University examinations increases. The same reasoning, however, which we have advanced above, will, no doubt, apply in this case too; and a surplus of revenue over expenditure on this account may be postulated without undue optimism.

290. The next most considerable item of expenditure is in connection with the establishment charges. They account for about 15.1 per cent of the total expenditure of the University. This appears to be a very heavy item, comparatively speaking, based on a costly scale absorbing a disproportionate amount of University revenue. To take an analogy, a university comprising four times the number of undergraduates of the Patna University, namely Bombay, with a budget of nearly 12 lakhs on either side, has establishment charges of only about Rs. 59,000 or 5 per cent. Any reasonable ratio of overhead costs of administration or establishment charges, to the total work done, should not exceed 5 per cent. There ought, besides, to be a progressive reduction in the cost, as the volume of work increases, so that, with improved efficiency, more work could be done with the same cost, or less cost incurred for the same work. The amount is, no doubt, relatively small for suggesting any substantial retrenchment or saving under that head under present conditions. We think it, however, not at all inadvisable to add that, as the work of the University grows, unless the University authorities are very jealous on this item of University expenditure, there would be needless waste, or undue costliness in the overhead charges. The University authorities will, therefore, have to lay down some definite standard, or normal ratio, to gauge the efficiency of their administrative machinery and its comparative cost. We suggest a proportion of about 5 to 7 per cent at most of the total revenue of the University would not be too low a standard; and we think it would be well if the University budget conforms to that.

291. The item of expenditure on travelling and inspection charges accounts for 10 per cent of the present budget. If the Senate and other University bodies, which we have recommended in other chapters of this Report, are expanded, and travelling allowance is made payable to members of such bodies on the same scale as today, this item is also bound to grow. But, even here, if comparison is permissible with a university

like Bombay, which has a much larger number of University bodies, including the Academic Council, Faculties, Boards of Studies, as well as the Senate, the Syndicate and Post-graduate Board, each with a considerable proportion of non-metropolitan members, and covering an area in extent much larger than the Province of Bihar, the total travelling allowance expenditure in that University comes to about Rs. 50,000 out of a total budget of 12 lakhs, or a little over 4 per cent, whereas here this item absorbs about 10 per cent of the total revenue. There seems, therefore, room for revising the entire scale of travelling allowance, and adopting other methods of effecting economy in this behalf, which would result in a substantial saving. We consider it necessary to add that even though the Senate and other University bodies be expanded on the lines we have suggested in this Report, it is not absolutely inevitable that expenditure on account of travelling allowance should grow in the same ratio. The efficiency and economy of University administration should be judged in proportion as the authorities concerned manage these charges in a relatively careful and thrifty manner.

292. Other items of University expenditure, such as, printing charges, though considerable, do not require any further comments. We have already referred above to the possibility of utilising a University Press and Publication Department, in such a manner as to make it cease to be a source of net expenditure, and turn it into an item of increasing revenue. The same may be said with regard to such other activities of the University as extension lectures, or specific investigation work, which may be done for industrial, commercial and agricultural organisations, and may add to the resources of the University. But this also depends upon the sense of efficiency and economy in the University authorities of the future, and we would not take it upon ourselves to offer further observations of a detailed nature in this regard.

293. If and when all these suggestions which we have made hitherto are carried into effect, with such modifications, if any, as the actual circumstances of the time may require, the aggregate University budget in Bihar may very possibly be in the neighbourhood of about 25 to 30 lakhs on either side. This would happen when the entire programme of educational reorganisation recommended by this Committee is given effect to. This amount will not, of course, be reached all at once. In fact, we have ourselves pointed out that even if all our proposals were immediately accepted, it would take 25 years for the full programme to be in working order even as regards

Basic education. The increase in the volume of secondary education, following upon this programme of Basic education, and still more, the increase in university work in consequence, will take longer to be completed. But the amount will be growing progressively. The rate of growth may be more rapid than we can anticipate today; and we must be prepared accordingly. The expenditure would be very wisely laid out, and revenues derived from sources least burdensome to the people contributing these revenues, if the observations we have made and suggestions put forward are systematically adopted.

294. We cannot, at this stage, undertake to reconstruct and present a *pro forma* budget for the University in the years to come, as it would be under the changed conditions that we have envisaged. But, generally speaking, the University budget would be on a deficit basis. For every time that there is a surplus, new activities would be found desirable to be undertaken, in excess very likely of the surplus available; and once more a deficit would result in consequence. One fundamental cure of such deficit, of course, would be the initial endowment of the University, not only by Government, but also by such public bodies, popular organisations, and public-spirited individuals, as would like to help the University to expand its activities on the lines and directions that we have suggested. We have also suggested how Government should lead the way by making the initial endowment in the shape of the amount which they spend on colleges, maintained by themselves, or aided by them, and also a further sum, calculated to suffice for a *pro rata* increase in the work of the University resulting from a reorganised system of education, as recommended in this Report. Even if all these resources are made available by Government to the University, they may not suffice for all the added responsibilities and increased activities we expect the University to undertake. It would, therefore, be desirable and necessary that additional endowments be invited and attracted by the University from public bodies, corporations, or individuals, who are interested in particular branches of university work, or who have a vision and public sympathy enough to make such endowments.

295. In another chapter of this Report, we have suggested particular ways and means by which specific institutions or departments for specific research and technology may be financed out of such endowments or grants. Activities of the University can then be beneficially extended and expanded by

the help of such endowments, under the ægis of the University, and also under its general management. If the principle there suggested is adopted and given effect to, there would be no reason to fear a continued deficit in the University budget of such dimensions as to render all our expectations impossible to realise for want of funds.

296. The recommendation we have made in this behalf must be read with the note on educational finance in general, which two of our colleagues have prepared at our instance and submitted to Government. Ways and means have there been outlined, which, if adopted, would place adequate resources at the disposal of Government for carrying out the entire programme of educational reorganisation. A reasonable portion of such improved resources may well be devoted to the cause of university education, scientific research, technological advancement, and cultural studies, though, we repeat, we have recognised and postulated that the first obligation on Government is in respect of primary or Basic education to all children of the school-going age in the Province free of all cost to the recipient. Only if a surplus is left after meeting in full this obligation, can funds be diverted to the expansion of secondary and university education. This must mean that in these two later stages of education, fees may be relied upon to provide a substantial proportion of the total cost of such education. But, even so, we have no doubt that, wisely handled, the methods we have suggested above for financing all expansion in university as well as secondary education will prove successful to meet our expectations.

## CHAPTER XII.

### SUMMARY OF RECOMMENDATIONS.

In the course of this Report, we have made several recommendations, on the reorganisation of the University, which may be summarised as follows:—

We have recommended that the University be made to take a more active part in direct teaching by reorganising its own departments of postgraduate studies, as well as by converting the present affiliated colleges to be part and parcel or constituent members of the University. The colleges which are under Government's management can, we think, be easily converted into this position, if Government accept our recommendations. In regard to colleges which are instituted by private trusts or by individual enterprise, and as such, unamenable to such conversion, these must, nevertheless, be brought under much closer control and supervision of the University. The University should be represented on the governing body of such colleges, and in the conduct and teaching of such colleges, the University should have a larger and much more direct share.

The constitution of the University is sought to be made more democratic, not only by introducing a larger volume of elected element in the supreme governing body of the University (Senate), but also by creating a much larger variety of electorates than is the case at present. The principle of responsibility is also introduced as between the University executive (Syndicate) and the University legislative body (Senate). A new body is proposed to take charge of the academic functions of the University, and is called Academic Council. The ultimate authority to lay down the policy on all matters of University concern is left to the Senate as the supreme governing body of the University, but subject to this, both the executive and the academic sides of the University are left free. The Faculties, the Boards of Studies, and other University bodies remain as they are, but their functions are recommended to be made much wider and more intimately connected with the daily life of the students.

The position of the Senate, the Syndicate, and the Academic Council is summarised below.

The Senate will be composed of the following classes of members:—

<i>Ex-officio</i> (about)	...	...	...	20
Nominated by the Chancellor	...	...	...	7

Nominated by the Government of Bihar ...	7
Elected by the Academic Council ...	5
Elected by University Teachers ...	10
Elected by Registered Graduates ...	40
Elected by the Provincial Legislature ...	7
Elected by organisations of commerce, industry, landlords, etc.	5
Elected by associations engaged in education outside the University.	5
Elected by headmasters of recognised secondary schools.	5
Elected by registered undergraduates ...	2
Life Members, nominated for distinguished service to the University.	5
Total ...	<hr/> 118 <hr/>

In addition to these, there would be the *ex-officio* and nominated members from Orissa so long as that Province continues to be served by this University, besides 25 members elected or nominated from the various bodies or authorities corresponding to those mentioned above with reference to the Province of Bihar, making, in the aggregate, 150 members, or more.

The constitution and powers of the Senate should be recast so as to make it more democratic in its composition, and better able to enforce the responsibility that the executive bodies in the University owe it. The Senate should be made, beyond the possibility of question, the supreme financial and policy-making as well as law-making authority in the University. It must be vested with adequate powers and resources to make good its wishes, and to carry out the changes implicit or specifically made in these recommendations.

The influence of the Provincial Government in the administration of University affairs should be reduced, by Government making over to the Senate all the funds which they now spend on University education through the colleges maintained directly or aided by them; and such other resources as may be deemed necessary for carrying out the changes suggested by us.

The Senate should likewise be made the final authority for the institution of new Chairs or Departments in the University, for the admission of new colleges as constituent or affiliated members of the University, and as a final appellate authority within the University in regard to any dispute regarding pay, promotion, or discipline of the University staff, whether academic or administrative.

The Syndicate should be mainly elective, consisting of 18 members in all, viz., the Vice-Chancellor, the Directors of Education of Bihar and Orissa—*ex-officio*, 8 elected by the Senate from among its own members not on the staff of any school or college, and 7 by the Academic Council from among its own members, the Vice-Chancellor being the Chairman of this body. The Syndicate should be responsible to the Senate in matters of policy, and be bound to carry out all the Resolutions of that body on matters of policy.

The strength of the Academic Council will depend upon the sets or groups of subjects, the number of institutions of the collegiate degree constituting the University, or recognised, admitted or affiliated by the University, and the heads of its postgraduate departments. Every head of the University department will have a place on the Academic Council. Besides heads of Faculties or representatives of the Boards of Studies conveniently grouped, if necessary, there will be a proportion of additional members elected by the governing and executive bodies in the University. Further, a small number by election, both by the Senate and the Syndicate, would also be there on this body.

The functions of the Academic Council would be: prescription of courses of studies, laying down text-books, defining the degree of proficiency in the practical training afforded, suggesting names for appointment of examiners to the executive authority; association with the Syndicate in recruiting the superior teaching staff for the various institutions in the University, or those conducted by the University, in the periodical inspection of the affiliated institutions, and in the general supervision over the several institutions started by the University, or aided and supervised by it, such as gymnasia, libraries, museums, laboratories, workshops, etc. Its jurisdiction would be final in purely academic matters subject to the right of the Senate to prescribe the basic policy. In other matters its functions should be consultative and recommendatory.

On the financial side we have recommended that Government should make over to the University the sum they now disburse in regard to University education and on account of the colleges they conduct, or by way of aid to private colleges, as a sort of permanent endowment, with such additions as the resources at the disposal of Government permit in order to facilitate the University's undertaking teaching and to permit research.

Suggestions have already been made for specific widening of University functions and activities, some of them of a routine character, and others of a "productive" nature, in the chapter dealing with finance, which, taken together, are expected to make the University self-sufficient as well as autonomous.

The Vice-Chancellor of the University, the executive head of that body, is to be an elected officer, elected under rules specially passed in that behalf by the Senate, holding office for a period of 3 years. He is to be the constitutional adviser to Government in matters relating to the University.

A suitable honorarium should be attached to the office of the Vice-Chancellor.

The Senate is to be made the supreme governing body in the University; and all other bodies therein, including the Syndicate, should be responsible to the Senate.

The executive authority in the University should be made responsible to its legislative counterpart.

The constitution and functions of other authorities or bodies in the University should be left to the supreme governing body in the University, namely, the Senate, to determine.

For the actual work of teaching, Boards of Studies for particular subjects or groups of them, will have to be constituted, again, by a resolution of the Senate, which may vary in number and powers from time to time as found necessary.

A special Postgraduate Board is necessary as the University takes over direct conduct of Postgraduate Studies. Other University bodies, such as a Publication Board, Employment Bureau, University Press Committee, University Students' Union Council, Sports Committee, Committee for the general welfare and discipline of students, should be instituted.

For admission to the University a special test should be introduced, if the present Matriculation examination is not found to be quite suitable for the purpose. Such a test must be provided by the University on its own authority. Some co-ordinated control over the secondary schools should also be established in connection with the Provincial Council of Secondary Education.

No age-limit need be fixed for admission to the University Entrance Examination, particularly for women.

Private candidates may have to be admitted under certain conditions; but the policy of the University should be, as far as possible, to discourage appearance of pupils not trained in any recognised institutions.

Examinations in the course of university education can hardly be dispensed with. The test must be made more real and intelligent and less mechanical. Wherever possible due weight should be given to the work of students during the period of their preparation, as also the record of their character and general efficiency, in addition to their answers to written questions.

The development of technological research in all branches of applied science and technology, particularly in regard to agriculture, industry, mining, metallurgy, forestry and commerce, should be carried out by attracting endowments from the interests concerned to establish and operate institutions, and provide suitable equipment in regard to staff, laboratories, and material for the purpose. Corporations, like the Tata Iron and Steel Company, Limited, at Jamshedpur, may be invited to assist in this task as suggested in Appendix I to Chapter VI.

The University should take more direct interest and active share in the development of the agricultural, industrial and commercial resources of the Province.

The extension and expansion of University activities may come by way of :—

- (i) Adding new departments to those now existing, and the lack of which makes the existing education in science incomplete.
- (ii) Making the necessary increase in the staff for these new departments.

- (iii) Providing research scholarships in each department.
- (iv) Offering encouragement to the staff to work in addition to their lecturing duties so as to keep abreast of time.

Government should invite the existing University authorities to prepare, at an early date, definite plans for the establishment of all the various technological institutions in the several parts of the Province, or even at one central place, in the various branches of applied science mentioned above, including reasoned estimates of the equipment, staff, buildings, etc., needed.

The University should be given some form of permanent endowment by Government, and such other interests, individuals, or organisations in the Province, as are interested in the progress and development of university education.

Endowing the University with wealth-yielding resources, sufficient to enable it to meet all the demands that can reasonably be made upon it, is worth exploring, if only to promote the fullest possible development of the highest research, technique, and training in the University that, for lack of such resources, may be unavailed of.

The time has come to organise properly not only the public services but also the semi-public services under municipalities, district boards and other public authorities, which would all need specialised talent. For these, competitive examinations will have to be held. The University alone can supply the need effectively. As the public seeking to avail themselves of this advantage would *ex-hypothesi* be in a position to pay for such benefits, it is not unreasonable to levy proportionate fees for this additional service, which may not only recoup the University for the daily needs, but also leave a surplus.

Adequate provision should also be made for "continuation classes" for adult citizens, in order to fit them for the task of a working democracy.

We accept the principle of co-education in the university stage of men and women; but subjects of special attraction for women have to be provided as options in the collegiate education.

In the conduct of examinations, and for the appointment of examiners, certain conventions will have to be laid down to ensure the purity of such appointments, and efficiency in the conduct of examinations.

A Regulation should be passed making it impossible for any individual examiner to value more than 100 papers in any academic year, yielding not more than Rs. 100 as examiner's honorarium all-told. This also implies that no one examiner should, in one and the same examination season, hold more than one examiner's appointment in the same University.

The examination results should be declared under definite Regulations, leaving no room for canvassing in the matter.

The medium of instruction, under present conditions, will have to be English in the University stage, for some years to come at least. Attempts must, however, be made simultaneously to develop the provincial language to a strength sufficient to replace English in the university stage.

All facilities should be obtained for students from the Province going in for higher education in foreign countries, for practical training in industrial and other establishments and corporations, which benefit from contracts for stores, etc., received from the Indian Governments or public authorities. For students thus trained, employment should be made available suitable to their qualifications, whether in Government service, or under any private agency.

The institution of apprenticeship should be introduced for those who have received the highest training for the practical requirements of their technical education and employment.

A review of the present finances of the University, including that of the several items of revenue and expenditure, shows the need for a considerable expansion of the resources of the University, if the obligations suggested above are to be undertaken by the University. Endowments by Government, public bodies, organisations of special interests, and public-spirited individuals, are the best methods for this purpose.

Expansion of the resources by means of a University Press and Publication Department as an ordinary consequence of the expansion of University activities, and increase in the

number of students, will also contribute their own proportion to the increased requirements. This will include both increased returns from examination fees on the revenue side, and increased expenditure on account of special equipment, etc., on the expenditure side.

*Chairman.*

K. T. SHAH.

*Members.*

SACHCHIDANANDA SINHA.

RAJENDRA PRASAD.

J. S. ARMOUR.

\*A. S. KHAN (Principal, Science College, Patna).

ZAKIR HUSSAIN.

GHULAMUS-SAIYIDAIN.

K. D. NAG.

BADRINATH VARMA.

AMARNATH JHA.

*Member-Secretary.*

B. MUKHARJI.

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\* Signed subject to note attached.

नमो भगवते वासुदेवाय

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वन्द्यो नमो नमो

**Note by Mr. A. S. Khan, I.E.S., Principal, Science College, Patna.**

While generally agreeing with the recommendations contained in this Report, I consider it necessary to indicate my personal opinion on some of the points discussed in it.

1. *Chapter I.*—I agree with the main conclusion of the Report that the Patna University should be, in future, more directly responsible for teaching work in the University than has been the case hitherto, and to this end, some of the existing colleges should be transferred to the direct management of the University. I, however, do not subscribe to the view that universities or other educational institutions in India have completely failed in their conception of the true aims or objectives of education; as to my mind, much of the enlightenment visible in India today, is due to the education imparted in these institutions. It is true, that universities in India have suffered by not having at their disposal the funds and endowments, with which to pursue the ideal of advancement of learning, in all possible ways and with a singleness of purpose, worthy of a university. For this very reason, a real reform will only result when this difficulty in the way of the University is removed.

2. *Chapter II, paragraphs 47—49, pages 18-19.*—I do not consider the idea of a federal university impracticable but the federal university cannot take the place of a local university.

3. *Chapter III, paragraph 66, page 28.*—I do not agree that “work of an original kind” mentioned in this paragraph was an afterthought. I feel, I must point this out in justice to some of the members of the Nathan Committee whom I had the honour of knowing and who attached great importance to the subject.

4. *Chapter III, paragraphs 86—89, pages 36-37.*—In my opinion the picture of an official ridden and undemocratic Senate has been over-drawn in the Report. It is to be borne in mind that the majority of the officials on the Senate are there not as officials but as members of one of the affiliated colleges of the University or as representing important educational interests. The creation of an Academic Council will, no doubt, do away with the necessity of the presence of a large number of teachers on the Senate, provided the Academic Council is given adequate powers of controlling purely academic matters. In my opinion, the Academic Council, if constituted, should be a statutory body and not a creation of the Senate as appears to be contemplated by the wording of paragraph 126, pages 55-56. See also paragraph 6 below.

5. *Chapter III, paragraphs 112—115, pages 49-50.*—The Report gives the impression that the existing Senate is not vested with sufficient power to control the University. The facts are that the Senate makes the Regulations and has complete legislative control over the affairs of the University within the framework of the Act. That it has not been able to accomplish much is due to lack of funds and not lack of power. A legislative body like the Senate, should not, in my opinion, make *ad hoc* decisions and exercise executive authority directly, but should do so through its executive bodies, viz., the Syndicate and the Academic Council.

6. *Chapter III, paragraph 105, pages 45-46.*—I am not in favour of undergraduate representation on the Senate. I think it to be undesirable that the excitement and controversy connected with the Senate election should be allowed to disturb the student mind at this stage of their education. Provision may, however, be made for the representation of the parents and guardians of these undergraduates on the Senate.

7. *Chapter III, paragraph 129, page 57—Academic Council.*—The Committee have recommended that the powers which are at present vested in Government, with regard to both Government and aided colleges, should, in future, be vested in the University. The Senate being the supreme authority of the University, will, therefore, have power covering the whole range of financial and administrative control. As such, it must consist of administrators, financiers, public men, etc., rather than of men of learning and educational experts, many of whom, will, under the existing condition of the Province, be salaried officers of the University. This being so, the purely academic point of view is in danger of being overlooked by such a Senate. It was for this reason that I agreed to the proposal to constitute an Academic Council to look after the purely academic business of the University. I, however, think that if the Academic Council is to serve any useful purpose, it must be properly constituted and should have statutory powers to enforce its decisions. It should be charged with the duty of maintaining the standard of teaching, examination and research in the University and its acts done, in accordance with and in pursuance of the Regulations, should not be subject to review, either by the Syndicate or the Senate, except where the decisions of the Council (1) have a financial implication and (2) go beyond the purely academic function of the maintenance of standards. In paragraph 126, pages 56-57 of the Report, it appears to be indicated that the Academic Council will be created by the Senate. I think in that case

it cannot possess the prestige and independence which is necessary for a body charged with the function of an Academic Council.

8. *Chapter IV, paragraph 163, page 74.*—In my opinion, an age-limit of 16 should be insisted on for students entering the University.

9. *Chapter V, paragraph 176, pages 83-84.*—I agree that security of tenure is essential to good work by officers of the University but I believe that the existing method of recruitment to the higher posts is defective. In my opinion, there should be definite pay or scale of pay attached to definite posts. It is also necessary, I think, that there should be a limited number of Chairs in different subjects which should be filled by eminent persons, whose services are to be secured by special contracts and who should not be employed to perform any administrative duties but should be wholly engaged on teaching and research work in their special subject.

10. *Chapter V, paragraph 184, pages 86-87.*—I am of opinion that Homœopathy or indigenous systems of medicine should not be introduced in the Medical College. If the University wishes to encourage any of these, it should be done in special institutes.

11. *Chapter VI, paragraph 215, pages 100-101.*—I am not in favour of the University publishing text-books, which its *alumni* are compelled to buy because the books are prescribed by the University, which has a financial interest in them. This tends to compel students to use unsatisfactory books, whereas they ought to be encouraged to use the best books available in the market. Open competition in quality tends to produce good books. Monopoly in the publication of text-books is, therefore, to be discouraged. But there is no objection to the University publishing suitable text-books, where this is necessary on academic grounds.

12. *Chapter VIII, paragraph 239, page 123.*—While it is true that the ordinary system of examination by means of written papers is often unsatisfactory and may even degenerate into a "lifeless, mechanical test of mere memory", the other kinds of tests mentioned in the Report, such as oral examination, examination of class work, etc., are not free from their own peculiar disadvantages. It has often been stated that examination is a necessary evil, and a necessary evil it will remain, whatever method of examination may be selected. My own experience leads me to believe that the

balance of advantage is on the side of writer except in practical subjects, where a practical is essential. Avoidable evils in examination honesty or carelessness on the part of examiners or on the part of those connected with the examination and (2) leakage of information regarding question paper. The University cannot be too vigilant regarding these two matters. It is difficult to maintain the secrecy of the questions if they are known to too many persons.

13. *Chapter VIII, paragraph 230, page 115 and paragraph 259, page 142*—In my opinion, separate colleges for women should be opened wherever the prejudice against co-education is likely to retard the spread of education amongst women.

14. *Chapter IX, paragraph 264, pages 144-145*.—In my opinion, at whatever stage English is replaced by Hindustani as a medium of instruction, only one script, e.g., the Roman script should be used for the teaching of non-language subjects. The difficulties of the use of different scripts for instruction in the same university are so obvious that it is scarcely necessary to elaborate the point. If an attempt is to be made to evolve a common language for the Province, almost the first step should be to adopt a common script. If Scotland and England were to adopt two different scripts, one may predict that in no distant future the language of England and Scotland will become so different as to be scarcely intelligible to each other. It is not easy to see how two different scripts can be utilised for instruction in the same class simultaneously, even if a common vocabulary were used.

## APPENDIX I.

No. 163-E.R.C.

## GOVERNMENT OF BIHAR.

OFFICE OF THE EDUCATION REORGANISATION COMMITTEE, BIHAR.

FROM

B. MUKHARJI, Esq., M.A., B.L. (CAL.), M.A.  
(EDN.) (LEEDS), MEMBER-SECRETARY OF THE  
EDUCATION REORGANISATION COMMITTEE,  
BIHAR,

To

ALL MEMBERS OF THE PATNA UNIVERSITY  
SENATE,  
MEMBERS OF THE FACULTIES AND BOARDS  
OF STUDIES,  
MEMBERS OF THE BOARD OF SECONDARY  
EDUCATION,  
PRINCIPALS OF COLLEGES,  
DIRECTOR OF INDUSTRIES, BIHAR,  
CHIEF ENGINEER, BIHAR,  
INSPECTOR-GENERAL OF CIVIL HOSPITALS,  
BIHAR.

*Dated Patna, the 30th November, 1938.*

SIR,  
MADAM,

I AM directed to send herewith a copy of the questionnaire issued by the Bihar Education Reorganisation Committee, and shall be grateful if you will assist the Committee with such answers as you may choose to give. The present questionnaire is confined to University (including Technical and Professional) Education; it is not meant to be exhaustive: you can deal with any matters relevant to it. Nor are you expected to answer all the questions included therein. It is particularly requested that your reply should reach my office on or before the 17th December 1938.

I have the honour to be,

SIR,  
MADAM,

Your most obedient servant,

B. MUKHARJI,  
*Member-Secretary.*

## BIHAR EDUCATION REORGANISATION COMMITTEE.

## QUESTIONNAIRE.

UNIVERSITY (INCLUDING TECHNICAL AND PROFESSIONAL)  
EDUCATION.*I.—Aims of University Education.*

1. How far does the University of Patna meet the appropriate aims and objectives of a properly constituted and efficiently functioning university?

2. To what extent can a university train people in this Province and provide opportunities to fulfil the objectives of such training? If they do not obtain such opportunities, what are the reasons for such failure, and how would you suggest the same should be remedied?

3. Can you point to any reasons inherent in the conditions of this Province which make the attainment of such objectives as the University has placed before it difficult, if not impossible? Would the fact that—

(a) this Province is industrially and commercially backward; or

(b) the University is common to two Provinces (Bihar and Orissa); or

(c) it is organised mainly for purposes which, in an age of changing provincial economy, are impossible to be always reconciled with the changing conditions of life in the Province,

explain this difficulty?

4. To what extent would you regard—

(a) the promotion of general culture;

(b) the cultivation of specialised advanced knowledge in any particular department of science or learning, and

(c) the training in practical branches of industrial, commercial or agricultural technique,

as fit and proper objectives for the University, its organisation, and working?

## II.—Commencement of University Education.

5. What would you regard as minimum preparation for admission into the university in any general or specialised line of learning, research, or training? Would you prescribe any age-limit for admission to the university?

6. How far do you regard the courses of education provided by the existing system of secondary schools reaching up to the Matriculation adequate for the purpose of serving as a proper foundation for education or training in the university? How would you suggest improving the shortcomings, if any, in this system?

7. What methods would you advocate to secure a proper degree of control over and supervision of the institutions preparing students for entrance to the university, with a view to ensure the standards of preparation and efficiency demanded by the university for admission thereto being maintained? For this purpose, would you advise the institution of a special agency for the control and supervision of the entire system of secondary education?

8. How far do you consider a radical change of the whole system of secondary education necessary so that there may be virtually two parallel departments of such education preparing the *alumni* availing themselves of this system, i.e., one section being devoted to preparing secondary school pupils to be fit for careers in practical life, and another section devoted to preparing for such general education as may be deemed sufficient to serve as an entrance to the university?

9. What are the branches of learning, scientific or technical, that you think should be specially cultivated in schools preparing *alumni* for the university?

10. Do you consider it desirable that actual division or specialisation of work in the university be organised in accordance with a pre-arranged plan of all-round provincial development, which will prescribe the number needed for the different phases of the programme of Provincial Development? If you consider it desirable, how would you set about giving effect to this idea?

11. Is it necessary or desirable, in your opinion, to have separate collegiate institutions for boys and girls for education or training in the university stage?

### III.—*Type of University.*

12. What type of university do you consider most suitable for this Province considering its present conditions of life, and the prospects of development in the immediate future, viz.—

- (i) Unitary and residential type of university located in one spot providing directly from its own resources tuition, guidance and practical training,
- (ii) a teaching university, teaching only advanced, specialised branches of knowledge, or training in postgraduate research, undergraduate training being left to affiliated colleges;
- (iii) exclusively an examining university prescribing standards of preparation for such examinations, as may be prescribed by it and conferring degrees, etc., as marks of fitness or success achieved?

13. To what extent should a university in this Province specialise, with advantage both to the Province and to the cause of learning—exclusively in any particular branches of knowledge, science or practical work, and leaving the requirements in which it does not specialise to be ministered to by contributing to a Federal Indian University?

14. If you accept the principle of a specialised university for the Province as indicated in the preceding question, what measures would you adopt to ensure that such students from Bihar as do not avail themselves of the university facilities in the Province itself, would be able to obtain the training they need in the Federal University?

15. What would you consider to be the reasonable measure of the Bihar Government's share in the government of such a federal university? How would you secure that share?

16. In the type of the university you have favoured what would be the relationship between the institutions which do the actual teaching or training work and the university?

### IV.—*Constitution.*

17. What are the defects, shortcomings, or handicaps of the existing constitution of the University in Bihar? How would you propose to remedy them?

18. To what extent do you consider the introduction of a democratic and "responsible" element in the governing bodies

of the University compatible with the sound working of the University and the due discharge of the obligations laid upon it?

19. What machinery would you suggest be introduced to establish effective contact between the University authorities and organ of public opinion in the Province, so as to render the University responsive to the main currents of public opinion?

20. How far does the University as organised today function, so as to cater adequately for the needs of the agricultural, industrial or commercial requirements of the Province?

21. How can the University contribute to the education of the adult population in the Province, which has not received the benefit of a higher education, so as to make the mass of the voters equal to the responsibilities of a democratic citizenship?

22. What should be the principal bodies and authorities in the University for the due and efficient discharge of the functions laid by law upon the University? How would you provide for solving cases of conflict between these several authorities in the University?

23. Do you consider it advisable to separate the academic from the executive and legislative functions of the several authorities in the University? If so, would you provide for the vesting of the final, supreme power in some body within the University, and make it "responsible" for the proper conduct of University policy and administration?

24. What should be the total strength of the several University bodies and authorities you have suggested above, and how should the same be recruited?

25. Would you leave any room for—

- (a) *ex-officio* membership;
- (b) nominated membership;
- (c) life membership?

Is there any necessity to provide for co-optation of any proportion of such bodies and authorities?

26. In the supreme governing body and authority in the University, however designated, what are the interests or elements you consider it advisable should find representation, and in what proportion *inter se*?

27. Would you consider it desirable and, if so, under what conditions, to provide any representation, however limited, for those who are the chief consumers of the service supplied by the University, the undergraduates, on the supreme governing body of the University ?

28. Do you consider it desirable that representation on University bodies and authorities should be secured for the various sections of the population, or for the several interests concerned, by means of—

- (a) proportional representation ;
- (b) reserved seats ;
- (c) separate electorates ;
- (d) Government nomination ;
- (e) any other device you can suggest ?

Give reasons.

29. Among the academic bodies or authorities considered necessary by you, e.g., an Academic Council. Faculties, Boards of Studies, Postgraduate Boards, Publications and Research Board, how would you provide for a division of powers and functions ?

30. How would you regulate the relations between the University, as an autonomous institution, and the Government of the Province, as representing the general public ?

31. What position would you assign, in the government of the University, to the Minister of Education within the Province ?

32. What would you suggest should be the principal officers and authorities of the University ? How should each of these be recruited ?

33. To what extent do you consider it at all desirable to have an *ex-officio* Chancellor of the University ?—e.g., the Governor of the Province ? Point out the advantages and disadvantages, if any, of an elective Chancellor, and describe the functions and authority you would vest in the Chancellor.

34. Do you think it desirable under the present conditions to have a nominated executive chief of the University, called the Vice-Chancellor ? If you consider the Vice-Chancellor should be an elected officer, what conditions would you lay down for his election ? For what term ? What functions

and powers, rights and duties would you assign to the Vice-Chancellor? Would you deem it fit and proper to provide for an honorarium to the Vice-Chancellor, or would you have him to be a wholly honorary officer?

35. How would you advise the Registrar of the University should be appointed, by what authority, for what term, on what conditions, and with what functions and duties?

36. How would you provide for the appointment and discipline of University officers and servants both academic and administrative?

37. What should be the relation, if any, between the Director of Public Instruction in the Province, and the University, or between the Secretary to the Education Department of the Provincial Government and the University?

38. To what extent do you consider it desirable to promote corporate life and habits of social co-operation among University students? Would you permit University students any right to political activity, with or without any safeguards?

*V.—Organisation of learning, research and training.*

39. What are the resources and facilities in regard to university education available in the Province at present? How far are these adequate?

40. Would you suggest any degree of separation or differentiation between the various classes of studies or training in university education? If so, at what stage would you suggest such specialisation, differentiation, or bifurcation should start? Would you require any co-ordination between these specialised or bifurcated courses of studies?

41. Would you insist upon any kind of minimum common education after a candidate has been admitted to the University, if such a candidate desires to go in for any professional education, e.g. Law, Medicine, Engineering, Science, Fine Arts, or General culture? If so, how would you ensure that a specialist exclusively in a given profession does not remain wholly ignorant of the ancillary branches of knowledge?

42. In any specialised branch of education or training, where practical work is indispensable for the proper education and training of a candidate, what steps would you suggest to enable such a candidate to obtain the necessary facilities for experience in practical work?

43. In the absence of any systematic plan for the absorption of young men and women trained in the University, in the various branches or departments of specialised work and training, what steps would you suggest should be adopted for the immediate employment of such people the moment they have qualified themselves adequately?

44. Would you indicate the courses of studies, and the modes of training, that would be necessary for a suitable Technical Institute for the Province of Bihar, which would meet the needs of this Province in the matter of (a) Agriculture, (b) Industry, and (c) Commerce?

45. How far do the existing colleges of Science and Engineering serve to meet this need? What improvements or additions do you consider necessary to bring up these institutions to the standard deemed necessary for an up-to-date Institute of Technology?

46. How would you suggest such a Technological Institute be financed in regard to buildings, equipment, machinery, etc., and apparatus, as well as its recurring expenditure?

47. Do you think it advisable that the leading magnates of the Province, whether agriculturists or industrialists, should be induced to finance such a Technological Institute, at least in regard to the branches of Science or Technology in which they are themselves interested?

48. If a Technological Institute of the kind mentioned in the preceding question is financed, both in its capital and its recurring cost, by private individuals, what measures would you adopt to regulate, control, supervise, and even to manage such an institution by and through (a) the Government of the Province, or (b) the University?

49. In the event of private individuals or corporations being unwilling to establish such a Technological Institute, how would you suggest the needs of the Province in this regard should be met?

50. If and when the University provides adequate facilities for postgraduate studies and research in the several branches, how should the degrees, diplomas, or other marks of attainment or recognition be awarded, by examination or thesis, or published original research, or by a combination of one or more of these?

51. In what way, in your opinion, can the University guide, encourage, or facilitate independent investigation in problems of specific importance to this Province in Arts, Science, Technology, Professions, Economics, Sociology or Industry?

52. How would you advise the result of such independent investigations be published, and made available to the world specially interested in that behalf?

53. Would you advise the institution of a special University Press, a Publication Department, or other modes of bringing to light the more advanced scientific, technological, or cultural research? What would be the financial liabilities, which, in your opinion, would be necessary to undertake, if such ventures were adopted by the University?

*VI.—University Staff—academic, executive, and ministerial.*

54. What staff do you think it would be necessary, under your recommendations, for the University to engage for the several departments and aspects of its work?

55. What grades and scales of pay and conditions of service would you recommend in the various branches of the University service?

*VII.—Examinations.*

56. To what extent does the University of Patna discharge, in your opinion, the functions of an examining body satisfactorily?

57. Are you in favour of prescribing specific text-books to facilitate the study in such branches of education as admit of this device being adopted? How far do you consider the prescribing of text-books open to objection, and what steps would you take to avoid such objection?

58. What conditions and stipulations, would you lay down for recognising, affiliating or admitting, any institution for preparing candidates for any of the University courses of studies, training, or practical work?

*VIII —Health and Welfare of students.*

59. What steps would you advocate for looking after the proper conditions of living, and good health amongst University students? Would you advocate a system of compulsory physical training amongst University students?

60. Are you in favour of introducing military training in the University, even as an optional subject? If so, what steps you consider necessary should be adopted to carry out this suggestion?

61. To what extent is it feasible by Regulations of the University to enforce in the student world a degree of discipline, moral rectitude, and decorum in every-day behaviour? Would you consider favourably the preparation and enactment of a Students' Charter of Rights and Obligations?

62. How far is it desirable for University authorities to organise a systematic programme for the proper and fruitful utilisation of University vacations?

#### *IX.—Women students.*

63. Do you consider it advisable to have identical courses of study, training or practical work for men as well as women students in the University? How far do you consider it desirable to have co-education among University students.

64. Is it possible in the existing circumstances of this Province to establish and maintain separate collegiate institutions for women in the various branches of learning, professional training, or scientific work?

65. Is there any special class or community, apart from women, whom you would select for particular attention by University authorities, so as to promote University education in that class or community?

#### *X.—Finance.*

66. Could you give an estimate of the additional capital and recurring cost, which the University would have to undertake to give effect to the recommendations you have made above?

67. What are the present resources at the disposal of the University from which any part of such capital or recurring cost should be met?

68. How far is it possible for the Provincial Government to increase substantially the grant necessary for enabling the University to carry out effectively the wider programme you have suggested?

69. Is it possible in this Province to obtain in any considerable degree, Endowments or Foundations for the

University from private individuals or corporations specially interested in the promotion of particular branches of learning, research, practical work, or specialised training?

*XI.—Miscellaneous.*

70. In what ways would you have the University recognise and appreciate distinguished work in fields of learning, research, or practical social or public service?

71. Would you have one uniform Honorary Degree (e.g., Ph.D.) in recognition of the several grounds mentioned in the preceding question, or would you suggest different and appropriate Honorary Degrees for the different kinds of learning, research work or public service?

72. Under what conditions or restrictions would you suggest the award and conferment of Honorary Degree should be safeguarded?

73. What measures or provisions would you suggest to encourage advanced specialised education or research in foreign countries for which the requisite facilities may not be available in this Province? To what extent is it feasible for the University to offer monetary prizes or other incentives to encourage original thought or work in fields not covered by the usual University activities?

74. How would you suggest the existing endowments of the Patna University should be utilised, in the event of the changes you have recommended being given effect to and the original purposes intended by the donors of such endowments becoming impossible to be achieved?

75. What should be the medium of instruction in the University?

## APPENDIX II.

*List of persons who replied to the questionnaire.*

1. Principal, St. Columba's College, Hazaribagh.
2. Principal, D. J. College, Monghyr.
3. Principal, Prince of Wales Medical College, Patna.
4. Dr. Ishwar Dutt, Professor of Sanskrit, Patna College.
5. Mr. D. N. Sen, Professor, Science College, Patna.
6. Mr. N. C. Chatterji, Professor, Patna Training College.
7. Rai Sahib R. K. Basu, Professor, G. B. B. College, Muzaffarpur.
8. Mr. J. N. Moitra, Professor, St. Columba's College, Hazaribagh and Fellow, Patna University.
9. Babu G. Upadhyaya, Professor, B. N. College.
10. Inspector-General of Civil Hospitals, Bihar.
11. Chief Engineer, Bihar.
12. Headmaster, P. M. Academy, Cuttack, and Member of the Patna University Senate.

नमो भगवते वासुदेवाय

## APPENDIX III.

**Expenses incurred in connection with the Committee.**

		Rs.	as.	p.
Pay of Joint Secretary	...	2,684	8	0
Pay of establishment	...	1,204	10	0
Travelling allowance	...	11,432	7	0
Contingencies	...	2,887	1	10
		<hr/>		
Total	...	18,208	10	10
		<hr/>		



B. MUKHARJI,

*Member-Secretary.*

सत्यमेव जयते

# INDEX.

## COMBINED INDEX OF THE REPORTS OF THE EDUCATION REORGANISATION COMMITTEE ON PRIMARY, SECONDARY AND UNIVERSITY, ETC., EDUCATION.

### Explanation of Symbols:—

- I. Refers to the Volume of the Report on Primary Education.
- II. Refers to the Volume of the Report on Secondary Education.
- III. Refers to the Volume of the Report on University, etc., Education.

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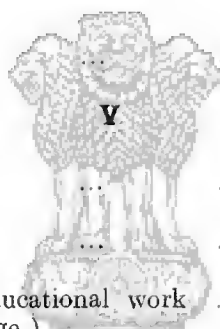
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